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ABSTRACT

This supplement updates the first supplement to the original catalog of available PLATO systems instructional materials. The original catalog was published in April 1980 and the first supplement in November 1981. The lessons described in the current publication have been used in actual instructional situations or have had adequate testing to guarantee that the files are in working order. Information for each listing is printed directly from the CERL on-line catalog ("uicat") and includes the subject heading; title with PLATO lesson code name, year of first copyright, and publication year; author; location of author at the time of lesson production; lesson abstract; auxiliary equipment required; completion time; and intended audience. Library of Congress subject headings have been used to catalog the lessons whenever possible, and cross-referencing of the lessons has been provided. Also provided is a listing by title of all the lessons published since the printing of the first supplement, and an updated index to the lesson catalog and catalog supplements. Programs listed range in level of difficulty from elementary through higher education, and cover a wide variety of subject areas including science, medicine, reading, mathematics, languages, business, and teacher education. (LMM)

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CERL PLATO LESSON CATALOG

Curricular and Utility Programs

Supplement Number 2

by

Deborah S. Postlewait

COMPUTER-BASED EDUCATION RESEARCH LABORATORY
UNIVERSITY OF ILLINOIS, URBANA, ILLINOIS
JANUARY 1983

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FOREWORD

The CERL PLATO Lesson Catalog Supplement Number 2 presents information on materials made available since publication of the first supplement published in November 1981. The materials contained herein are lessons which have been used in actual instructional situations, or have had adequate testing to guarantee that the files are in working order. The information in the catalog is printed directly from the CERL on-line catalog, "uicat".

The information for each lesson is presented in the following format:

Subject
  Sub-heading (if any)
    TITLE (PLATO lesson codename; year of first copyright; publication year)
    Author(s)
    Location of author(s) at time of lesson production
      Abstract of lesson
    Auxiliary equipment required; lesson completion time; intended audience

Library of Congress subject headings have been used to catalog the lessons whenever possible. Extensive cross referencing of the lessons has been made. Thus, repetition of lessons and their information abounds throughout the catalog for the convenience of the users.

Also provided with this supplement are a listing by title of all those lessons published since the printing of the first supplement, and an updated index to the CERL PLATO Lesson Catalog and the CERL PLATO Lesson Catalog Supplement Numbers 1 and 2. Page numbers prefixed with an "s" are listed in the first supplement. Page numbers prefixed with "ss" are listed in the second supplement.

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LESSSONS PUBLISHED SINCE NOVEMBER 1981

A and P Mechanics General, Written Examination Study Guide
A and P Mechanics Powerplant, Written Examination Study Guide
Adding and Subtracting Signed Numbers
Adrenal Gland Steroid Biosynthesis
Affective Illnesses and Their Causes and Treatments
Airline Transport Pilot-Airplane, Written Examination Study Guide
Anatomical Reference Terminology
And Everything Nice
"And You Are There", Stroke Syndrome Case Study Number One
"And You Are There", The Big City Neurologist and Mrs. Cribblecrobbles
Anemias of Pregnancy
Ant Hill
Antimicrobial Chemotherapy
The Anxious Patient: A Simulated Care Problem
Automated Chem I: An Introduction to the SMA 6/60
Automated Chem II: An Introduction to the SMA 12/60
Basic Thermodynamics Quiz
Behavior of Gases
Canine Neurological Diagnosis
Carbohydrates (Part III)
Change-of-Phase Problems
Checkup: Plotting Points
Chronic Bronchitis
Chronic Bronchitis Part II
Commercial Pilot-Airplane, Written Examination Study Guide
Community Development Author/Instructor Information Lesson
The Concept of Dependence
Congenital Defects of the Heart and Great Vessels
Data Analysis
Death and Dying
Dietary Analysis
Digestive Organs and Their Functions (Part II)
Elements for Self-Expression in Spanish, Module 1
    How to Use the PLATO Keyboard
Elements for Self-Expression in Spanish, Module 2
    The Spanish Language in the World
Elements for Self-Expression in Spanish, Modules 3-10
    The Pronunciation of Spanish
Elements for Self-Expression in Spanish, Modules 11-14
    Learning to Spell and Read Spanish
Elements for Self-Expression in Spanish, Modules 15-178
    Exercises in Vocabulary and Grammar
Emergency Treatment of Patient Reaction to Contrast Media
Energy (Part VI)
Enthalpy Effects
Enzyme: Clinical Diagnosis by Laboratory Methods
Enzyme Kinetics
Enzyme Kinetics: Allosteric Control
Enzyme Kinetics: Interactive Graphics
Enzyme Kinetics: Introduction

Experimental Technique
Experimenting with Hyperbolas
Experimenting with Linear Graphs
Fat-Soluble Vitamins
Fetal Monitoring: Graphic Analysis
Finite Differences
First Law of Thermodynamics, Part I
First Law of Thermodynamics, Part II
Flight Instructor-Airplane, Written Examination Study Guide
Functional Mechanics of Ventilation
Fundamentals of Instructing, Written Examination Study Guide
Gas Transport in the Blood
General Overview for Basic Nutrition PLATO Series (Part I)
Graphic Analysis of Labor
Gross Anatomy of the Thoracic Cage
History in Respiratory Disease
Holding Patterns, An Introduction
Ideal Gases and Real Fluids, Part I
Ideal Gases and Real Fluids, Part II
Identification of Carbohydrates
Infectious Infiltrative Lung Disease Part I
Intonation Training
Introduction to Equilibrium Stages
Introduction to PLATO
Introduction to Respiration and Ventilation
An Introduction to Units, Symbols, and Reaction Stoichiometry
An Introduction to Medical Library Cataloguing
Introduction to Serum Enzymes
The King's Mission Game
Latent Image Patient Problem
Life in a Microcosm
Linear Graphing Checkup: Intercepts and Slopes
Lipids (Part IV)
Mr. Q's Dilemma, or Different Strokes for Different Folks
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Making Up Identities
Making Up Open Sentences
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Material Balances without Chemical Reaction (Basic)
The Mathematics of Dosages
Microminerals
Multiple Congenital Deformities, Management and Prognosis
Mysterious Spinal Cord Cases, Case Number Two: The Brown-Sequard Syndrome, or a Delinquent's Demise
Mysterious Spinal Cord Cases, Case Number Four: The Syndrome of Anterior Spinal Artery Occlusion
Neurosis and the Treatment of Neurosis
Noxious Drugs
Number Accumulator
Number Names for Today
Organization of the Human Body
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Physical Exam of the Respiratory System
Plant Genetics Problems
Problem Oriented Medical Record
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Simulated Patient Encounter
Skip Counting with Cars
Solving Open Sentences
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Structure and Functions of the Ear
Structure and Functions of the Skeletal System
Thermodynamics Diagrams (Basic)
The Thyroid
Tic-Tac-Toe
Total Energy Balance, Steady State, Part I
Total Energy Balance, Steady State, Part II
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Yellow Dirt Down In My Soul

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Abbreviations

ABBREVIATIONS (dv158a;1978;unpublished)
Dirk Grunwald
Danville C. C. School District, Danville, Illinois
This lesson presents abbreviations for days, months, titles, and measurement.
touch panel;none;elementary level students

Activity coefficients

EVALUATION OF FUGACITY COEFFICIENTS - PURE MATERIALS (che42;1979;unpublished)
Robert S Tomaskovic, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana
This lesson describes various methods for evaluation of fugacity coefficients of pure gases, liquids, and solids, and is designed for undergraduate thermodynamics students. There are five practice problems.
none;none;chemical engineering students

EVALUATION OF FUGACITY COEFFICIENTS - MIXTURES (che50;1979;unpublished)
Robert S Tomaskovic, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana
This lesson describes various methods for evaluation of fugacity coefficients of gas phase mixtures, and introduces solubility of liquids and solids in a dense gas. There are four practice problems.
none;none;chemical engineering students

REGULAR SOLUTION THEORY (che31;1979;unpublished)
Timothy T Oberle, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana
This lesson teaches the student about using regular solution theory to find activity coefficients in binary and multicomponent liquid mixtures. There are five practice problems.
none;none;chemical engineering students

THE CORRELATION OF ACTIVITY COEFFICIENTS USING VARIOUS SOLUTIONS TO THE GIBBS-DUHEM EQUATION (che25;1979;unpublished)
Timothy T Oberle, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana
This is a lesson on using various equations to fit binary activity coefficient data, designed for students in a first chemical engineering thermodynamics course. There are six exercises.
none;none;chemical engineering students

Addition

CROSSNUMBER PUZZLES (dv109b;1978;unpublished)
Brian Smith
Danville C. C. School District, Danville, Illinois
This lesson is a crossword puzzle game in which the student fills in the answers to simple arithmetic problems to solve the puzzle.
none;none;elementary level students

NUMBER WARS (dv108b;1978;unpublished)
Dirk Grunwald
Danville C. C. School District, Danville, Illinois
With a "space war" scenario, this lesson offers the student practice in addition, subtraction, multiplication and division problems.
none;none;elementary level students

WELCOME TO BLOKIT (dv110b;1978;unpublished)
Damon Scaggs
Danville C. C. School District, Danville, Illinois
This is a mathematics game of Bingo in which the student tries to get four numbers in a row on the playing card by using combinations of two dice rolls given by the computer.
none;none;elementary level students

WELCOME TO SUM-THING (dv115b;1978;unpublished)
Ken Metheny
Danville C. C. School District, Danville, Illinois
This elementary math drill gives the student a block of numbers and asks the student to pick two adjacent numbers that equal the desired value.
touch panel;none;elementary level students

Adenosinetriphosphate synthesis

RESPIRATORY CHAIN (nevilla;1981;unpublished)
William A Nevill, Ilias Sotos
Indiana University / Purdue University
This lesson discusses the chemical steps which comprise the respiratory chain, and illustrates the chemical reactions of the coenzymes and production of ATP.
none;20 minutes;students of the health sciences

Adrenal glands

ADRENAL GLAND STEROID BIOSYNTHESIS (adrenal;1981;1981)
Ralph E Schooley
School of Basic Medical Sciences, Univ. of Illinois
In this lesson the student must identify operant enzymes in adrenal gland biosynthetic pathways that are presented in random order. Enzymes which are not correctly identified are presented once again after all the enzymes have been treated.
none;none;medical students and students of the health sciences

Adrenergic mechanisms

REVIEW OF ALPHA-ADRENERGICS (pha87;1974,81;unpublished)
Darin Brox, Cathy Adams
University of Alberta, Canada / University of Kansas
This lesson provides a brief summary of alpha-adrenergics, sixteen review questions with feedback, and a list of related key words and phrases.
touch panel;20 minutes;students of pharmacology

REVIEW OF BETA-ADRENERGIC DRUGS (pha88;1974,81;unpublished)
Darin Brox, Cathy Adams
University of Alberta, Canada / University of Kansas
This lesson provides a brief summary of beta-adrenergics, eighteen review questions, and a list of related key words and phrases.
touch panel;20 minutes;students of pharmacology

Aeronautical and astronautical engineering

AIRCRAFT/AIRPLANE DESIGN (aeroroute;1977;unpublished)
Shahid Siddiqi, James A Bennett, Jeffrey Glass,
Glenn R Incorvia, Kenneth N Everett
Dept. of Aero. and Astro. Engineering, U of I, Urbana
With this group of lessons the student will learn to do elementary but complete designs of many types of aircraft. A section on performance sensitivity to changes in various design choices is available, allowing the user to see the effects of changes in the design.
none;open-ended;students of aeronautical and astrological engineering

Aeronautics

A AND P MECHANICS, AIRFRAME - WRITTEN EXAMINATION STUDY GUIDE (aflight;1978;unpublished)
Stanley R Trollip, William C Entwistle
Institute of Aviation, U of I, Urbana, Illinois
This lesson allows the student to practice taking the written examination for airframe A and P mechanics. The user may choose to take a quiz over one major category, a quiz over one or more subcategories, or a general quiz over all categories.
supplemental handout;open-ended;student flight instructors

FLIGHT ENGINEER - BASIC WRITTEN EXAMINATION STUDY GUIDE (feflight;1978;unpublished)
Stanley R Trollip, William C Entwistle
Institute of Aviation, U of I, Urbana, Illinois
This lesson allows the student to practice taking the written examination for flight engineer. The user may choose to take a quiz over one major category, a quiz over one or more subcategories, or a general quiz over all categories.
supplemental handout;open-ended;student flight instructors

Aeronautics--Examinations, questions, etc.

A AND P MECHANICS, AIRFRAME - WRITTEN EXAMINATION STUDY GUIDE (aflight;1978;unpublished)
Stanley R Trollip, William C Entwistle
Institute of Aviation, U of I, Urbana, Illinois
This lesson allows the student to practice taking the written examination for airframe A and P mechanics. The user may choose to take a quiz over one major category, a quiz over one or more subcategories, or a general quiz over all categories.
supplemental handout;open-ended;student flight instructors

FLIGHT ENGINEER - BASIC WRITTEN EXAMINATION STUDY GUIDE (feflight;1978;unpublished)
Stanley R Trollip, William C Entwistle
Institute of Aviation, U of I, Urbana, Illinois
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supplemental handout;open-ended;student flight instructors

Aeroplanes--Design and construction

AIRCRAFT/AIRPLANE DESIGN (aeroroute;1977;unpublished)
Shahid Siddiqi, James A Bennett, Jeffrey Glass,
Glenn R Incorvia, Kenneth N Everett
Dept. of Aero. and Astro. Engineering, U of I, Urbana

With this group of lessons the student will learn to do elementary but complete designs of many types of aircraft. A section on performance sensitivity to changes in various design choices is available, allowing the user to see the effects of changes in the design.

none;open-ended;students of aeronautical and astrological engineering

Algebra

ABSOLUTE VALUE (absvalue;1981;unpublished)
Larry Dornhoff
Dept. of Mathematics, University of Illinois, Urbana

This lesson provides examples and exercises in the evaluation of expressions involving absolute value, and algebraic solution of equations and inequalities involving absolute value.

none;17-35 minutes;high school and college algebra students

ALGEBRAIC FRACTIONS (algfracs;1981;unpublished)
Larry Dornhoff
Dept. of Mathematics, University of Illinois, Urbana

This lesson provides introductory examples and student drill in the algebraic manipulation of simple algebraic fractions: multiplication, subtraction, and simplification.

none;30-65 minutes;high school and college algebra students

CIRCLES (circles1;1981;unpublished)
Larry Dornhoff
Dept. of Mathematics, University of Illinois, Urbana

This lesson presents the graphing of circles in the x,y-plane, including the standard form equation of a circle and algebraic methods for obtaining this standard form from other equations of the circle. Exercises are provided.

none;15-30 minutes;high school and college algebra students

COMPLEX NUMBERS (complx1;1981;unpublished)
Larry Dornhoff
Dept. of Mathematics, University of Illinois, Urbana

This lesson introduces complex numbers with exercises in the addition, subtraction, multiplication, division, and conjugation of complex numbers.

none;15-30 minutes;high school and college algebra students

COMPOSITE AND INVERSE FUNCTIONS (funcs;1981;unpublished)
Larry Dornhoff
Dept. of Mathematics, University of Illinois, Urbana
This lesson provides definitions, examples, and exercises on constant, identity, composite, and inverse functions. The student also learns how to tell if an inverse function exists, and how to find it.
none;17-35 minutes;high school and college algebra students

EXPONENTIAL FUNCTIONS (expfuncs;1980;unpublished)
Larry Dornhoff
Dept. of Mathematics, University of Illinois, Urbana
This lesson presents graphing and algebraic solution of equations with the unknown in the exponent. Exercises involving population growth, radioactive decay, and compound interest are also presented.
none;27-55 minutes;high school and college algebra students

FINDING THE LEAST COMMON MULTIPLE OF ALGEBRAIC EXPRESSIONS (math951;1978;unpublished)
Richard Neapolitan
Chicago City Colleges
This lesson teaches the student to find the least common multiple of algebraic expressions. Practice problems are included.
none;none;elementary algebra students, adult education

FUNCTIONS AND THEIR GRAPHS (funcgraf;1981;unpublished)
Larry Dornhoff
Dept. of Mathematics, University of Illinois, Urbana
This lesson provides definitions, examples, algebraic notation, and graphs of functions. Exercises in the evaluation of functions, including composite functions, are included.
none;25-50 minutes;high school and college algebra students

GRAPHIC MATH PROBLEMS (dv119b;1978;unpublished)
Ken Metheny
Danville C. C. School District, Danville, Illinois
In this lesson the student is asked to solve problems like "4+x=15" and is only given a short time to respond.
optional touch panel;none;elementary level students

ss7

GRAPHING IN CARTESIAN COORDINATES (graphsl;1981;unpublished)

Larry Dornhoff
Dept. of Mathematics, University of Illinois, Urbana

This lesson provides examples and drill which should enable the algebra student to review and strengthen his or her knowledge of basic graphing in the x,y-plane. Topics treated are plotting of points, the four quadrants, and graphing equations with a table of values.

none;17-35 minutes;high school and college algebra students

GRAPHS OF STRAIGHT LINES (linegraf;1981;unpublished)

Larry Dornhoff
Dept. of Mathematics, University of Illinois, Urbana

This lesson presents graphing of straight lines in the x,y-plane. Definitions, examples, and exercises involving the slope formula, point-slope and slope-intercept equations, and parallel and perpendicular lines are included.

none;15-30 minutes;high school and college algebra students

INTRODUCTION TO ALGEBRAIC EXPRESSIONS (algexprs;1980;unpublished)

Larry Dornhoff
Dept. of Mathematics, University of Illinois, Urbana

This lesson provides introductory examples and drill in evaluation and simplification of algebraic expressions. Commutative, associative, and distributive laws are discussed, along with cancellation to simplify fractions.

none;15-30 minutes;high school and college algebra students

LINEAR EQUATIONS IN ONE VARIABLE (lineqs;1981;unpublished)

Larry Dornhoff
Dept. of Mathematics, University of Illinois, Urbana

This lesson provides worked examples and student drill in the algebraic solution of linear equations in one variable. Also introduced are word problems which can be solved with similar methods.

none;15-30 minutes;high school and college algebra students

LINEAR INEQUALITIES (linineqs;1980;unpublished)

Larry Dornhoff
Dept. of Mathematics, University of Illinois, Urbana

This lesson discusses graphical and algebraic solutions of strict, nonstrict, or compound linear inequalities, with intensive drill.

none;20-40 minutes;high school and college algebra students

MATRICES (matrices;1981;unpublished)
Larry Dornhoff
Dept. of Mathematics, University of Illinois, Urbana
This lesson defines a matrix, its size and its entries. It treats the computation of determinants, with exercises for 2x2, 3x2, and 4x4 determinants. Exercises involving the use of Cramer's Rule to solve 2x2 or 3x3 systems of simultaneous linear equations are also included.
none;32-65 minutes;high school and college algebra students

MISCELLANEOUS EQUATIONS (eqsolve;1981;unpublished)
Larry Dornhoff
Dept. of Mathematics, University of Illinois, Urbana
This lesson contains exercises in the algebraic solution of equations involving square roots, or equations which become quadratic equations after an appropriate substitution.
none;17-35 minutes;high school and college algebra students

POLYNOMIALS (polynoms;1981;unpublished)
Larry Dornhoff
Dept. of Mathematics, University of Illinois, Urbana
This lesson introduces algebraic polynomials, including terms, coefficients, degrees, and evaluation of polynomials. Exercises in the addition, subtraction, multiplication, and division of polynomials are provided, as well as exercises in short-cut "synthetic division" by divisors of the form "x - a".
none;35-70 minutes;high school and college algebra students

RATIO, PROPORTION, AND VARIATION (ratiovar;1981;unpublished)
Larry Dornhoff
Dept. of Mathematics, University of Illinois, Urbana
This lesson provides definitions, worked examples, and student drill in the solution of word problems involving ratio, proportion, and direct, inverse, and joint variation.
none;30-60 minutes;high school and college algebra students

REDUCING ALGEBRAIC FRACTIONS (math95g;1978;unpublished)
Richard Neapolitan
Chicago City Colleges
This lesson teaches the student to reduce algebraic fractions to the lowest possible terms. Practice problems are included.
none;none;elementary algebra students, adult education

ss9

SOLVING WORD PROBLEMS (mathelp1;1980;unpublished)
David L Allen
Southern Illinois University, Carbondale, Illinois
This three-part lesson provides the student with practice in translating common English expressions found in ordinary word problems into mathematical expressions. Translating mathematical expressions into English expressions is also treated. A test is given after each of the three sections.
none;none;students of basic mathematics

WORD PROBLEMS (wordprbl;1981;unpublished)
Larry Dornhoff
Dept. of Mathematics, University of Illinois, Urbana
This lesson provides the student with worked examples and drill in several types of story problems which are to be solved with linear equations in one variable: rate problems, problems from geometry, mixture problems, simple interest, and mixed-value problems.
none;45-90 minutes;high school and college algebra students

Algebra--Problems, exercises, etc.

EVALUATING ALGEBRAIC EXPRESSIONS (eac;1978;unpublished)
Errol Magidson
Kennedy-King College, Chicago, Illinois
In this lesson the student will learn to evaluate algebraic expressions by substituting numbers for letters and then solving the problem.
none;none;students of basic mathematics, adult education

FINDING THE LEAST COMMON MULTIPLE OF ALGEBRAIC EXPRESSIONS (math951;1978;unpublished)
Richard Neapolitan
Chicago City Colleges
This lesson teaches the student to find the least common multiple of algebraic expressions. Practice problems are included.
none;none;elementary algebra students, adult education

GRAPHIC MATH PROBLEMS (dv119b;1978;unpublished)
Ken Metheny
Danville C. C. School District, Danville, Illinois
In this lesson the student is asked to solve problems like "4+x=15" and is only given a short time to respond.
optional touch panel;none;elementary level students

REDUCING ALGEBRAIC FRACTIONS (math95g;1978;unpublished)
Richard Neapolitan
Chicago City Colleges
This lesson teaches the student to reduce algebraic fractions to the lowest possible terms. Practice problems are included.
none;none;elementary algebra students, adult education

Alphabeting

WORDS IN ALPHABETICAL ORDER (dv114a;1978;unpublished)
Andy Wiese
Danville C. C. School District, Danville, Illinois
This lesson teaches the student to alphabetize words.
touch panel;none;elementary level students

Amniotic liquid

AMNIOTIC FLUID (mnurse9;1975;unpublished)
Maryann Bitzer, Martha Boudreaux
Mercy Hospital School of Nursing, Urbana, Ill.
Upon completion of this lesson the student will be able to list the characteristics and describe the functions of amniotic fluid, and recognize some of its uses in prenatal diagnosis.
none;none;nursing students

Anatomy, Human

ANATOMY AND PHYSIOLOGY: CELLS, TISSUES, AND ORGANS (surgap;1979;unpublished)
Richard M Stawicki
Sheppard Air Force Base, Texas
This lesson defines the terms anatomy, physiology, and anatomical position, and identifies the basic composition of the cell, four types of tissue, organs of the body, and systems of the body.
none;none;students of the health sciences

Anatomy, Human--Terminology

MEDICAL TERMINOLOGY (medword;1982;unpublished)
V M Henkels
Southern Illinois University, Carbondale, Illinois
This lesson presents nine practice quizzes to help the student learn medical terminology, and an examination over all.
none;open-ended;students of medicine and the health sciences

Anemia in pregnancy

ANEMIAS OF PREGNANCY (nmwanemia;1977,81;1982)
Sarah J Naber, Richard S Trynda
College of Nursing, U of I Med. Center, Chicago, Il.
The purpose of this lesson is to provide the student with an opportunity to make judgments in the management of anemias of pregnancy based on historical and laboratory data.
touch panel;none;nursing students

Anesthesia in obstetrics

ANALGESIA/ANESTHESIA APPLICATIONS IN NURSE-MIDWIFERY PRACTICE (nmwanes;1977,81;1982)
Sarah J Naber, Richard S Trynda
College of Nursing, U of I Med. Center, Chicago, Il.
This lesson teaches the student to recognize indications for analgesia and anesthesia in the intrapartum period and to manage the cases presented successfully. Each case has several points for student judgement and management.
none;none;nursing students

Antidepressants

INTRODUCTION TO PSYCHOTROPIC DRUGS (psycho;1981;unpublished)
Sandra Y Barnes, Sylvia A Mann, Erica M Trausch, Larry Kemp
College of Nursing, U of I Med. Center, Chicago, Il.
This lesson discusses the effects of drugs on the autonomic nervous system.
none;none;nursing students

Anxiety

ANXIETY (anxious;1981;1982)
Janice M Layton
College of Nursing, U of I Med. Center, Chicago, Il.
This lesson defines anxiety, its threat to physical and psychological security, interpersonal communications, and the physiological, perceptual, mental and behavioral effects of anxiety.
none;none;nursing students

Apostrophe

APOSTROPHES (dv153a;1978;unpublished)
Joan Jamieson, Joan Friedenberg
Danville C. C. School District, Danville, Illinois
This lesson teaches the student how and when to use an apostrophe in a sentence.
touch panel;none;elementary level students

Arithmetic

Addition

CROSSNUMBER PUZZLES (dv109b;1978;unpublished)
Brian Smith
Danville C. C. School District, Danville, Illinois
This lesson is a crossword puzzle game in which the student fills in the answers to simple arithmetic problems to solve the puzzle.
none;none;elementary level students

NUMBER WARS (dv108b;1978;unpublished)
Dirk Grunwald
Danville C. C. School District, Danville, Illinois
With a "space war" scenario, this lesson offers the student practice in addition, subtraction, multiplication and division problems.
none;none;elementary level students

WELCOME TO BLOKIT (dv110b;1978;unpublished)
Damon Scaggs
Danville C. C. School District, Danville, Illinois
This is a mathematics game of Bingo in which the student tries to get four numbers in a row on the playing card by using combinations of two dice rolls given by the computer.
none;none;elementary level students

WELCOME TO SUM-THING (dv115b;1978;unpublished)
Ken Metheny
Danville C. C. School District, Danville, Illinois
This elementary math drill gives the student a block of numbers and asks the student to pick two adjacent numbers that equal the desired value.
touch panel;none;elementary level students

Coordinate systems

ORDERED PAIRS (dv106b;1978;unpublished)
Kevin Seager
Danville C. C. School District, Danville, Illinois
This elementary mathematics lesson presents the X and Y axes and then drills the student on identifying the location of various objects on those axes.
none;none;elementary level students

ssl3

Counting

NUMBERS AND OBJECTS (dvl52b;1978;unpublished)
Don Gillies
Danville C. C. School District, Danville, Illinois
This primary math lesson asks the student to count the pictures on the screen and type or touch the answer.
touch panel;none;primary level students

Division

CROSSNUMBER PUZZLES (dvl09b;1978;unpublished)
Brian Smith
Danville C. C. School District, Danville, Illinois
This lesson is a crossword puzzle game in which the student fills in the answers to simple arithmetic problems to solve the puzzle.
none;none;elementary level students

NUMBER WARS (dvl08b;1978;unpublished)
Dirk Grunwald
Danville C. C. School District, Danville, Illinois
With a "space war" scenario, this lesson offers the student practice in addition, subtraction, multiplication and division problems.
none;none;elementary level students

WELCOME TO BLOKIT (dvl10b;1978;unpublished)
Damon Scaggs
Danville C. C. School District, Danville, Illinois
This is a mathematics game of Bingo in which the student tries to get four numbers in a row on the playing card by using combinations of two dice rolls given by the computer.
none;none;elementary level students

WELCOME TO SUM-THING (dvl15b;1978;unpublished)
Ken Metheny
Danville C. C. School District, Danville, Illinois
This elementary math drill gives the student a block of numbers and asks the student to pick two adjacent numbers that equal the desired value.
touch panel;none;elementary level students

Exponents

EXPONENTS (exp3;1978;unpublished)
Steve Robinson
City Colleges of Chicago
After completing this lesson the student should be able to write multiplication notation in exponential notation form, and, given exponential notation, write it in multiplication notation form and calculate the numerical value.
none;none;community college, vocational and technical students; GED students

LILYPOND (lilypond;1976,82;unpublished)
Silas Warner, Brent R Sweeny
Indiana University
This math lesson provides a practice game for exponentials. After seeing an example of exponential growth of lilies in a pond, the student has the opportunity to change the parameters governing the rate of growth, and guess the outcome.
none;30 minutes;general

Fractions

MATH MAZE, A LESSON ON ADDING FRACTIONS (dv147b;1978;unpublished)
Stephen Gray
Danville C. C. School District, Danville, Illinois
This game requires that the student solve fraction problems in order to make his or her way across a maze.
touch panel;none;elementary level students

General

BINGO MATH (dv135b;1978;unpublished)
Stephen Gray
Danville C. C. School District, Danville, Illinois
This program provides an elementary mathematics bingo game. In order to fill in a space on the bingo "card", the student must solve a simple math problem.
touch panel;open-ended;elementary level students

CIRCLES AND CYLINDERS (dv143a;1978;unpublished)
Greg Janusz
Danville C. C. School District, Danville, Illinois
This lesson teaches the student about circumference, cylinder volume, and circle area. The student is expected to learn the mathematical formulae presented.
none;none;elementary level students

ssl5

GREATER THAN, EQUAL TO, AND LESS THAN (dv123a;1978;unpublished)
Stephen Gray
Danville C. C. School District, Danville, Illinois
This elementary lesson teaches children to use the arithmetic symbols meaning greater than (>), equal to (=), and less than (<). A game is included for practice.
touch panel;none;elementary level students

MATH KINGDOM (dvldung;1978;unpublished)
Greg Janusz, Andy Wiese
Danville C. C. School District, Danville, Illinois
This program provides a mathematical "dungeon" game in which the student moves around in a maze, answering math questions in order to "kill" monsters and build a strong dungeon character.
none;none;elementary level students

MATH WORDS (dv138b;1978;unpublished)
Stephen Gray
Danville C. C. School District, Danville, Illinois
In this elementary level lesson the student answers math problems to solve a cryptographical problem.
none;open-ended;elementary level students

MAZE RACE (dv170a;1980;unpublished)
Gregory Maggs
Danville C. C. School District, Danville, Illinois
This game requires that the student solve mathematics problems in order to make his or her way across a maze.
none;none;elementary level students

NUMBER NAMES (dv113b;1978;unpublished)
Dirk Grunwald
Danville C. C. School District, Danville, Illinois
This elementary lesson provides a drill on the names of numbers.
votrax; touch panel;none;elementary level students

NUMBERS AND OBJECTS (dv152b;1978;unpublished)
Don Gillies
Danville C. C. School District, Danville, Illinois
This primary math lesson asks the student to count the pictures on the screen and type or touch the answer.
touch panel;none;primary level students

ss16

NUMBERS IN ORDER (dv142b;1978;unpublished)
Don Gillies
Danville C. C. School District, Danville, Illinois
This elementary math lesson teaches the student to put numbers in order.
touch panel;none;elementary level students

SHAPE CATEGORIZING (dv111a;1978;unpublished)
Stephen Gray
Danville C. C. School District, Danville, Illinois
This lesson explains the idea of a category and teaches the student to categorize simple shapes.
touch panel;none;elementary level students

THE CLOCK AND BOMB (dv171a;1980;unpublished)
Gregory Maggs
Danville C. C. School District, Danville, Illinois
In this elementary math game the student answers math questions in a race against a bomb or a clock.
none;none;elementary level students

WELCOME TO SHAPES (dv116b;1978;unpublished)
Dieter W Lawrence
Danville C. C. School District, Danville, Illinois
This lesson requires the preschool student to choose similar shapes from a choice of four.
touch panel;none;preschool level students

Graphing

GRAPHING (dv150a;1978;unpublished)
Damon Scaggs
Danville C. C. School District, Danville, Illinois
This lesson provides an introduction to graphing, covering both line and bar graphs.
none;none;elementary level students

SEA BATTLE (battleship;1975-78;1982)
Graph. Strand Elem. Math. Group
U of I NSF Elem. Math Group, Urbana, Ill.
This is an on-line version of the game, Battleship, in which the object of the game is to shoot at and sink the opponent's ships on the board. The user plays against the computer, and fires by plotting points on the graph.
none;open-ended;elementary mathematics students

Multiplication

CROSSNUMBER PUZZLES (dv109b;1978;unpublished)
Brian Smith
Danville C. C. School District, Danville, Illinois
This lesson is a crossword puzzle game in which the student fills in the answers to simple arithmetic problems to solve the puzzle.
none;none;elementary level students

NUMBER WARS (dv108b;1978;unpublished)
Dirk Grunwald
Danville C. C. School District, Danville, Illinois
With a "space war" scenario, this lesson offers the student practice in addition, subtraction, multiplication and division problems.
none;none;elementary level students

WELCOME TO BLOKIT (dv110b;1978;unpublished)
Damon Scaggs
Danville C. C. School District, Danville, Illinois
This is a mathematics game of Bingo in which the student tries to get four numbers in a row on the playing card by using combinations of two dice rolls given by the computer.
none;none;elementary level students

WELCOME TO SUM-THING (dv115b;1978;unpublished)
Ken Metheny
Danville C. C. School District, Danville, Illinois
This elementary math drill gives the student a block of numbers and asks the student to pick two adjacent numbers that equal the desired value.
touch panel;none;elementary level students

Numbers, Prime

PRIME NUMBERS (dv144b;1978;unpublished)
Dirk Grunwald
Danville C. C. School District, Danville, Illinois
This elementary lesson teaches the student about prime numbers and how to identify them. There is also a game section in which the student must "trap" aliens marked with prime numbers.
none;none;elementary level students

Subtraction

CROSSNUMBER PUZZLES (dv109b;1978;unpublished)
Brian Smith
Danville C. C. School District, Danville, Illinois
This lesson is a crossword puzzle game in which the student fills in the answers to simple arithmetic problems to solve the puzzle.
none;none;elementary level students

NUMBER WARS (dv108b;1978;unpublished)
Dirk Grunwald
Danville C. C. School District, Danville, Illinois
With a "space war" scenario, this lesson offers the student practice in addition, subtraction, multiplication and division problems.
none;none;elementary level students

SUBTRACTION BOXES (dv104a;1978;unpublished)
Bruce Maggs
Danville C. C. School District, Danville, Illinois
This lesson presents a short introduction and then requires the student to fill in parts of a "magic square" to solve simple subtraction problems. Fifteen "magic squares" are offered.
touch panel;none;elementary level students

SUBTRACTION WITH TANKS (dv117b;1978;unpublished)
Dirk Grunwald
Danville C. C. School System, Danville, Illinois
This elementary lesson teaches subtraction by way of an animated tank game.
none;none;elementary level students

WELCOME TO BLOKIT (dv110b;1978;unpublished)
Damon Scaggs
Danville C. C. School District, Danville, Illinois
This is a mathematics game of Bingo in which the student tries to get four numbers in a row on the playing card by using combinations of two dice rolls given by the computer.
none;none;elementary level students

WELCOME TO SUM-THING (dv115b;1978;unpublished)
Ken Metheny
Danville C. C. School District, Danville, Illinois
This elementary math drill gives the student a block of numbers and asks the student to pick two adjacent numbers that equal the desired value.
touch panel;none;elementary level students

Arithmetic--Problems, exercises, etc.

BINGO MATH (dv135b;1978;unpublished)
Stephen Gray
Danville C. C. School District, Danville, Illinois
This program provides an elementary mathematics bingo game. In order to fill in a space on the bingo "card", the student must solve a simple math problem.
touch panel;open-ended;elementary level students

MATH WORDS (dv138b;1978;unpublished)
Stephen Gray
Danville C. C. School District, Danville, Illinois
In this elementary level lesson the student answers math problems to solve a cryptographical problem.
none;open-ended;elementary level students

NUMBERS IN ORDER (dv142b;1978;unpublished)
Don Gillies
Danville C. C. School District, Danville, Illinois
This elementary math lesson teaches the student to put numbers in order.
touch panel;none;elementary level students

Arrangement (Music)

AN INTRODUCTION TO VOICE LEADING (voice1;1979;unpublished)
Gary Wittlich, Jon A Conrad
Indiana Univeristy School of Music
This lesson is designed to provide drill in basic four-part voice leading situations. The user may choose among various types of choral progressions and may elect to specify the key each time or to have it chosen by the computer.
none;open-ended;music students

Arrest

ARRESTS (arrests;1977;unpublished)
Joe Harbaugh, Ira Goldman, Jane Kelso, J Clark Kelso
Temple U. School of Law/College of Law, Indiana U.
In this timed simulation the student assumes the role of Assistant District Attorney and must decide, after reviewing the provided information, whether or not to arrest a prime suspect in a larceny case.
none;none;law students

Asphyxia

FIRST AID SIMULATIONS (schindler;1979;unpublished)

Jay Schindler

Dept. of Health Education, U of I, Urbana

This lesson is designed to place the student in a simulated emergency. A description of the victim in need of first aid is provided and it is up to the student to choose the correct first aid actions to save the victim's life. There are three simulations.

none;none;students of first aid

Associative law (Mathematics)

INTRODUCTION TO ALGEBRAIC EXPRESSIONS (algexprs;1980;unpublished)

Larry Dornhoff

Dept. of Mathematics, University of Illinois, Urbana

This lesson provides introductory examples and drill in evaluation and simplification of algebraic expressions. Commutative, associative, and distributive laws are discussed, along with cancellation to simplify fractions.

none;15-30 minutes;high school and college algebra students

Atomic theory

HOW BIG IS AN ATOM? (shull;1974;unpublished)

Harrison Shull

Indiana University

The objective of this lesson is to simulate an experiment by which one might determine the size of an hydrogen atom.

none;30 minutes;freshman chemistry or physics students

Attorney and client

COUNSELING PROGRAMS (counsel;1980;unpublished)

Jean Cahn, Edgar Cahn, Jane Kelso, Charles D Kelso, J Clark Kelso

College of Law, Indiana University

This lesson provides exercises which treat the different phases of the lawyer/client relationship and teach important lawyering skills.

none;none;law students

Automobile mechanics

MULTIPLE PUMP FUEL SYSTEM (chamfps;1981;unpublished)

Al Shaw

Chanute Air Force Base, Illinois

This lesson illustrates and describes the functions of the automotive multiple pump fuel system which is used in many diesel engines.

none;none;persons interested in automobile mechanics

THE VARIABLE SPEED HYDRAULIC GOVERNOR (chagov;1981;unpublished)
Al Shaw
Chanute Air Force Base, Illinois
This lesson discusses the function, construction and operation of the automotive variable speed hydraulic governor.
none;none;persons interested in automobile mechanics

Automobiles--Motors (Diesel)

MULTIPLE PUMP FUEL SYSTEM (chamfps;1981;unpublished)
Al Shaw
Chanute Air Force Base, Illinois
This lesson illustrates and describes the functions of the automotive multiple pump fuel system which is used in many diesel engines.
none;none;persons interested in automobile mechanics

THE VARIABLE SPEED HYDRAULIC GOVERNOR (chagov;1981;unpublished)
Al Shaw
Chanute Air Force Base, Illinois
This lesson discusses the function, construction and operation of the automotive variable speed hydraulic governor.
none;none;persons interested in automobile mechanics

Autonomic nervous system

AUTONOMIC NERVOUS SYSTEM REVIEW QUIZ (pha08;1974,81;unpublished)
Darin Brox, R J Reiffenstein
University of Alberta, Canada / University of Kansas
This lesson provides twenty review questions on the autonomic nervous system. Alpha and beta adrenergics and catecholamines are covered. Some of the questions relate autonomic nervous system pharmacology to clinical situations. The student receives feedback for each question.
touch panel;20 minutes;students of pharmacology

CATECHOLAMINE BIOSYNTHESIS (pha05;1981;unpublished)
Darin Brox, D Cook
University of Alberta, Canada
This lesson reviews catecholamine biosynthesis. Synthesis sites and stages are shown, and drug effects and clinical aspects are discussed. The student is asked questions after each section.
touch panel;15 minutes;students of pharmacology

CHOLINERGIC MECHANISMS (pha04;1981;unpublished)
Darin Brox, D Cook
University of Alberta, Canada
This pharmacology lesson presents the structure, toxicity, receptors, locus of muscarinic sites, and antagonists of cholinergic mechanisms.
touch panel;20 minutes;students of pharmacology

CHOLINESTERASE (pha06;1981;unpublished)
Darin Brox, D Cook
University of Alberta, Canada
This lesson provides a review of acetylcholinesterase as well as cholinesterase inhibitors. Effects of the compound are related to clinical situations and each section is followed by a short quiz.
touch panel;20 minutes;students of pharmacology

INTRODUCTION TO AUTONOMIC PHARMACOLOGY (pha07;1981;unpublished)
Darin Brox, D Cook
University of Alberta, Canada
This lesson discusses various aspects of the autonomic nervous system and tests the student's understanding of the material with periodic questions.
touch panel;15 minutes;students of pharmacology

INTRODUCTION TO PSYCHOTROPIC DRUGS (psycho;1981;unpublished)
Sandra Y Barnes, Sylvia A Mann, Erica M Trausch, Larry Kemp
College of Nursing, U of I Med. Center, Chicago, Il.
This lesson discusses the effects of drugs on the autonomic nervous system.
none;none;nursing students

REVIEW OF ALPHA-ADRENERGICS (pha87;1974,81;unpublished)
Darin Brox, Cathy Adams
University of Alberta, Canada / University of Kansas
This lesson provides a brief summary of alpha-adrenergics, sixteen review questions with feedback, and a list of related key words and phrases.
touch panel;20 minutes;students of pharmacology

THE NICOTINIC CHOLINERGIC SYSTEM (pha84;1974,81;unpublished)
Darin Brox, Cathy Adams
University of Alberta, Canada / University of Kansas
This lesson presents a brief summary of the nicotinic cholinergic system, thirteen review questions with feedback, and a list of related key words and phrases.
touch panel;15 minutes;students of pharmacology

Azeotropes

VAPOR-LIQUID EQUILIBRIUM AND AZEOTROPES (che40;1979;unpublished)
Timothy T Oberle, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana
This is a lesson on vapor-liquid equilibrium and azeotropes designed for undergraduate students studying thermodynamics and phase equilibrium. There are six practice problems.
none;none;chemical engineering students

Bacillus anthracis

THE GENUS BACILLUS: A TUTORIAL LESSON (bacillus;1980;unpublished)
Marcia Johnson, Eunice Schuytema
Rush University, Chicago, Illinois
This lesson covers morphology, metabolism, antigenic structure and pathogenic properties of the genus bacillus. A quiz is included.
none;30 minutes;first year medical students and students of microbiology and bacteriology

Bacteria, Pathogenic

THE GENUS BACILLUS: A TUTORIAL LESSON (bacillus;1980;unpublished)
Marcia Johnson, Eunice Schuytema
Rush University, Chicago, Illinois
This lesson covers morphology, metabolism, antigenic structure and pathogenic properties of the genus bacillus. A quiz is included.
none;30 minutes;first year medical students and students of microbiology and bacteriology

Bacteriology, Medical

THE GENUS BACILLUS: A TUTORIAL LESSON (bacillus;1980;unpublished)
Marcia Johnson, Eunice Schuytema
Rush University, Chicago, Illinois
This lesson covers morphology, metabolism, antigenic structure and pathogenic properties of the genus bacillus. A quiz is included.
none;30 minutes;first year medical students and students of microbiology and bacteriology

Bar examinations

CALIFORNIA PROFESSIONAL RESPONSIBILITY EXAMINATION FEBRUARY 1975 (ethics2;1976;unpublished)
Peter B Maggs, Bruce Maggs, Gregory Maggs
College of Law, University of Illinois, Urbana, Ill.
This lesson contains practice questions on legal ethics from the California Bar Examination.
none;none;law students

Bibliographies

Music

COMPUTER APPLICATIONS IN MUSIC -- AN ONLINE BIBLIOGRAPHY
(musbib;1979;unpublished)
John M Eddins, G. David Peters
Southern Illinois University / University of Illinois

This lesson provides an online bibliography of published materials pertaining to applications of computers to music instruction, research, analysis, and composition. Searches may be made by author, title, subject, or any combination of the three.

none;open-ended;music researchers

Biological chemistry

RESPIRATORY CHAIN (nevilla;1981;unpublished)
William A Nevill, Ilias Sotos
Indiana University / Purdue University

This lesson discusses the chemical steps which comprise the respiratory chain, and illustrates the chemical reactions of the coenzymes and production of ATP.

none;20 minutes;students of the health sciences

Biological transport

GASP! A SIMULATION OF HUMAN VENTILATION, PULMONARY GAS EXCHANGE, GAS TRANSPORT, METABOLISM ... (gasp;1981;unpublished)
C Dickenson, D Ingram, E J Campbell, N L Jones,
A S Rebuck, K Ahmed, Thomas Stibolt, Jerry Justic,
Lisa Brenner, Chisoo Choi
Rush University, Chicago, Illinois

This research level simulation offers 300 alterable parameters and represents an accurate model of the human respiratory system. Instructional problems are offered to guide novices in the selection of parameters and variables. The model for this lesson was developed at St. Bartholomew's Hospital, London, England and McMaster University, Ontario, Canada.

none;open-ended;second year medical students and students of physiology, pathology and pulmonary medicine

Biomechanics

A QUALITATIVE ANALYSIS OF THE FOREHAND STROKE IN TENNIS
(tenfml;1981;unpublished)
Larry Good, Diann Gordon
Southern Illinois University, Carbondale, Illinois

This two unit lesson teaches the student to analyze human motion and understand the underlying principles, and to apply the mechanical principles of force and motion to an analysis of the forehand stroke in tennis.

none;none;students of physical education; persons interested in tennis

Biosynthesis

ADRENAL GLAND STEROID BIOSYNTHESIS (adrenal;1981;1981)
Ralph E Schooley
School of Basic Medical Sciences, Univ. of Illinois

In this lesson the student must identify operant enzymes in adrenal gland biosynthetic pathways that are presented in random order. Enzymes which are not correctly identified are presented once again after all the enzymes have been treated.

none;none;medical students and students of the health sciences

Birth control

A SIMULATED PATIENT CASE REGARDING THE INTRAUTERINE DEVICE (blackwell;1977,81;unpublished)
Jane Blackwell, Richard S Trynda
College of Nursing, U of I Med. Center, Chicago, Il.

The purpose of this simulation is to act as a refresher lesson for certified nurse-midwives regarding the use of an intrauterine device.

none;none;nurse-midwives, nursing students

Blindness

RETROLENTAL FIBROPLASIA, BLINDNESS CAUSED BY OXYGEN THERAPY (rlf;1982;unpublished)
Robert J Smith
School of Basic Medical Sciences, U of I, Urbana

This lesson discusses the etiology, developmental processes, treatment, and prevention of retrolental fibroplasia. The mechanics section has graphic representations of the progressive disfiguration of the retina which is the outstanding characteristic of this disorder. Periodic questions are asked to assist the student in the retention of key points.

none;20 minutes;first and second year students of medicine

Blood cell count

RED BLOOD CELL INDICES (rbci;1980;unpublished)
Nancy A Lee, Scott Rubenstein
Rush University, Chicago, Illinois

This hematology lesson presents information about the red blood cell indices and how they relate to cellular morphology. Calculation of the indices is also discussed. There is a quiz at the end in which the student must calculate the indices from given values and then answer questions on cell morphology based on the calculated values of the indices.

none;45 minutes;students of medical technology and hematology

Blood flow

BAROCEPTOR REVIEW (heartsm2;1981;unpublished)
Allen Rovick, R Zitnik, A Banda
Rush University, Chicago, Illinois
This cardiovascular physiology lesson provides elementary treatment of the baroceptor control system and explores the role of the effector responses in regulation of blood pressure by having the student complete a control diagram under guidance.
none;none;first year medical students and students of physiology

CARDIOVASCULAR PHYSIOLOGY PART II: REFLEX (reflex;1981;unpublished)
Allen Rovick, R Zitnik
Rush University, Chicago, Illinois
This lesson deals primarily with the baroceptor reflex. Pressure, flow, resistance relationships, postural effects, general efferent components and specific regional effects are covered.
none;none;first year medical students and students of physiology

CARDIOVASCULAR PHYSIOLOGY PART I: PRESSURE/FLOW RELATIONS (circsys;1981;unpublished)
Allen Rovick, Jerry Justic
Rush University, Chicago, Illinois
This lesson tests the student's understanding of blood flow relationships including pump capacity of the heart, tensile strength of blood vessels, and porosity of capillaries.
none;none;first year medical students and students of physiology

CARDIOVASCULAR PHYSIOLOGY PART III: CAPILLARY (capilary;1981;unpublished)
Allen Rovick, R Zitnik
Rush University, Chicago, Illinois
This cardiovascular physiology lesson covers the organization of circulatory circuits, distribution of pressure and velocity flows, and capillary fluid exchange. Elements in Starling's Hypothesis are included with specific examples.
none;none;first year medical students and students of physiology

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Blood--Circulation

FETAL CIRCULATION (mnurse6;1975;unpublished)
Maryann Bitzer, Martha Boudreaux, Donald Bitzer
Mercy Hospital School of Nursing, Urbana, Ill.
After completing this lesson the student should be able to describe the development of placental circulation, explain the differences between the fetal and mature circulatory systems, and trace the flow of blood through the fetal circulatory system.
microfiche;none;nursing students

Blood--Circulation, Disorders of

INTRODUCTION TO SHOCK (chew3;1969,75,81;unpublished)
Sherrilyn DeJean, Gregory Olson
Indiana University School of Nursing
This lesson presents the basic hemodynamics of shock along with causes and symptoms of the shock state.
none;30 minutes;nursing or medical students

PHYSIOLOGY AND PATHOLOGY OF CARDIOVASCULAR SHOCK (cvshock;1978;unpublished)
Steven R White
U of I College of Medicine, Chicago, Illinois
This lesson discusses the different types of shock and their effects on the cardiovascular system. Questions are asked during the instruction and there is a quiz at the end of the lesson.
none;40 minutes;students of medicine

Blood--Coagulation

COAGULATION SYSTEMS (coagsys;1980;unpublished)
Nancy A Lee, Lisa Brenner
Rush College, Chicago, Illinois
This hematology lesson presents coagulation factors and groups these factors according to site of synthesis, common characteristics and mode of action. It describes the two major pathways of coagulation and controls that prevent excess clotting. Lab tests for evaluating coagulation and explaining abnormal data are also discussed.
none;1 hour;students of medical technology and hematology

Blood flow

BAROCEPTOR REVIEW (heartsm2;1981;unpublished)
Allen Rovick, R Zitnik, A Banda
Rush University, Chicago, Illinois

This cardiovascular physiology lesson provides elementary treatment of the baroceptor control system and explores the role of the effector responses in regulation of blood pressure by having the student complete a control diagram under guidance.

none;none;first year medical students and students of physiology

CARDIOVASCULAR PHYSIOLOGY PART II: REFLEX (reflex;1981;unpublished)
Allen Rovick, R Zitnik
Rush University, Chicago, Illinois

This lesson deals primarily with the baroceptor reflex. Pressure, flow, resistance relationships, postural effects, general efferent components and specific regional effects are covered.

none;none;first year medical students and students of physiology

CARDIOVASCULAR PHYSIOLOGY PART I: PRESSURE/FLOW RELATIONS (circsys;1981;unpublished)
Allen Rovick, Jerry Justic
Rush University, Chicago, Illinois

This lesson tests the student's understanding of blood flow relationships including pump capacity of the heart, tensile strength of blood vessels, and porosity of capillaries.

none;none;first year medical students and students of physiology

CARDIOVASCULAR PHYSIOLOGY PART III: CAPILLARY (capilary;1981;unpublished)
Allen Rovick, R Zitnik
Rush University, Chicago, Illinois

This cardiovascular physiology lesson covers the organization of circulatory circuits, distribution of pressure and velocity flows, and capillary fluid exchange. Elements in Starling's Hypothesis are included with specific examples.

none;none;first year medical students and students of physiology

Capillaries

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Allen Rovick, Jerry Justic
Rush University, Chicago, Illinois

This lesson tests the student's understanding of blood flow relationships including pump capacity of the heart, tensile strength of blood vessels, and porosity of capillaries.

none;none;first year medical students and students of physiology

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Allen Rovick, R Zitnik
Rush University, Chicago, Illinois

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none;none;first year medical students and students of physiology

Cardiology

HEARTBREAK: A SIMULATION OF THE HEART AND PERIPHERAL CIRCULATION (heartsim;1980;unpublished)
C Dickenson, K Ahmed, C Goldsmith, D Sackett,
Allen Rovick, Lisa Brenner, Chisoo Choi
Rush University, Chicago, Illinois

This lesson provides a simulation of the heart and peripheral circulation, accounting for the heart inside the chest, systemic arteries and arterioles, and capillary bed and veins collecting blood from the capillary bed and returning it to the heart. The model can simulate most types of generalized heart disease, with the exception of valve lesions.

none;open-ended;first year medical students and students of physiology

NURSING MANAGEMENT OF THE PEDIATRIC CARDIAC PATIENT (nmpcp1;1978,81;1982)
Dorothy P Colsant, Richard S Trynda
College of Nursing, U of I Med. Center, Chicago, Il.

These four lessons provide simulations in which the student is responsible for assessment and management of the pediatric cardiac patient. In each lesson the student must review the child's case and devise a management plan for the child and parents. Other simulations are found in "nmpcp2", "nmpcp3", and "nmpcp4".

none;none;nursing students

Cardiovascular system

BAROCEPTOR REVIEW (heartsm2;1981;unpublished)
Allen Rovick, R Zitnik, A Banda
Rush University, Chicago, Illinois

This cardiovascular physiology lesson provides elementary treatment of the baroceptor control system and explores the role of the effector responses in regulation of blood pressure by having the student complete a control diagram under guidance.

none;none;first year medical students and students of physiology

CARDIOVASCULAR PHYSIOLOGY PART I: PRESSURE/FLOW RELATIONS (circsys;1981;unpublished)
Allen Rovick, Jerry Justic
Rush University, Chicago, Illinois

This lesson tests the student's understanding of blood flow relationships including pump capacity of the heart, tensile strength of blood vessels, and porosity of capillaries.

none;none;first year medical students and students of physiology

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Allen Rovick, R Zitnik
Rush University, Chicago, Illinois

This cardiovascular physiology lesson covers the organization of circulatory circuits, distribution of pressure and velocity flows, and capillary fluid exchange. Elements in Starling's Hypothesis are included with specific examples.

none;none;first year medical students and students of physiology

CARDIOVASCULAR PHYSIOLOGY PART II: REFLEX (reflex;1981;unpublished)
Allen Rovick, R Zitnik
Rush University, Chicago, Illinois

This lesson deals primarily with the baroceptor reflex. Pressure, flow, resistance relationships, postural effects, general efferent components and specific regional effects are covered.

none;none;first year medical students and students of physiology

HEARTBREAK: A SIMULATION OF THE HEART AND PERIPHERAL CIRCULATION (heartsim;1980;unpublished)
C Dickenson, K Ahmed, C Goldsmith, D Sackett,
Allen Rovick, Lisa Brenner, Chisoo Choi
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none;open-ended;first year medical students and students of physiology

PHYSIOLOGY AND PATHOLOGY OF CARDIOVASCULAR SHOCK (cvshock;1978;unpublished)
Steven R White
U of I College of Medicine, Chicago, Illinois

This lesson discusses the different types of shock and their effects on the cardiovascular system. Questions are asked during the instruction and there is a quiz at the end of the lesson.

none;40 minutes;students of medicine

Categories (Mathematics)

SHAPE CATEGORIZING (dv111a;1978;unpublished)
Stephen Gray
Danville C. C. School District, Danville, Illinois

This lesson explains the idea of a category and teaches the student to categorize simple shapes.

touch panel;none;elementary level students

Cell organelles

HISTOLOGY: ELECTRON MICROGRAPHS (histoem;1981;unpublished)
James A Colgan, M K Haag
Rush University, Chicago, Illinois

This lesson covers subcellular organelles via microfiche projection of electron micrographs. The lesson is divided into three parts: visual identification of the organelles, functions of the organelles, and identification of the organs of tissues most often associated with the organelles.

microfiche;none;first year medical students and students of histology

Cells

ANATOMY AND PHYSIOLOGY: CELLS, TISSUES, AND ORGANS (surgap;1979;unpublished)
Richard M Stawicki
Sheppard Air Force Base, Texas
This lesson defines the terms anatomy, physiology, and anatomical position, and identifies the basic composition of the cell, four types of tissue, organs of the body, and systems of the body.
none;none;students of the health sciences

RUSH PATH: A SLIDE REVIEW (genpath;1980,81;unpublished)
Henry Tazelaar, Barbara Banner, J Nosal,
Jerry Justic, Sanford Sherman
Rush University, Chicago, Illinois
This three part lesson deals with general pathological processes. With discussion and slide review, the following subjects are treated: cell injury and death, intracellular accumulations and inflammation, cell healing and repair, fluid and hemodynamic derangements, and neoplasia.
microfiche and touch panel;approximately two hours;second year medical students and students of pathology

Central nervous system

HYPNOTICS AND SEDATIVES (phc20;1974,81;unpublished)
R J Reiffenstein, Darin Brox
University of Alberta, Canada / University of Kansas
This lesson provides a review of sedatives and hypnotics and a ten question quiz over the material. The student may choose to do either.
touch panel;15 minutes;students of pharmacology

REVIEW OF BETA-ADRENERGIC DRUGS (pha88;1974,81;unpublished)
Darin Brox, Cathy Adams
University of Alberta, Canada / University of Kansas
This lesson provides a brief summary of beta-adrenergics, eighteen review questions, and a list of related key words and phrases.
touch panel;20 minutes;students of pharmacology

Chemical engineering--Problems, exercises, etc.

ADVANCED THERMODYNAMIC DIAGRAMS (che26;1977,78,79;unpublished)
Timothy T Oberle, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana
This is a lesson on reading and using various diagrams designed for a junior level thermodynamics course in chemical engineering. There are six practice problems.
touch panel;none;chemical engineering students

ss33

CARNOT HEAT ENGINES (che28;1979;unpublished)
Robert S Tomaskovic, Timothy T Oberle
Dept. of Chemical Engineering, U of I, Urbana
This is a lesson on Carnot cycle analysis designed for a junior level thermodynamics course in chemical engineering.
none;none;chemical engineering students

CHEMICAL REACTION EQUILIBRIUM (che39;1979;unpublished)
Robert S Tomaskovic, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana
This lesson provides practice for the student in evaluating equilibrium constants.
none;none;chemical engineering students

COMPRESSION AND EXPANSION OF FLUIDS AND POWER CYCLES (che52;1981;unpublished)
Robert S Tomaskovic, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana
This lesson treats the derivation of expressions for heat transferred and work done by a pure fluid during batch (non-flow) and flow process. Both isothermal and adiabatic conditions are investigated along with effects of staging. Also discussed are the internal combustion engine and steam power cycle. There are six practice problems.
none;none;chemical engineering students

DISTILLATION - THE METHOD OF MCCABE-THIELE (che21;1978;unpublished)
Michael Gilbert, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana
This lesson is set up to solve distillation problems. The user will be asked for the relative volatility, the composition of the streams, the thermal conditions of the feed (q), and the reflux ratio. With this data, the lesson will "step" the student through the McCabe-Thiele method of distillation.
none;none;students of chemical engineering

ENTROPY EFFECTS (che23;1978,79;unpublished)
Timothy T Oberle, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana
This lesson provides a lesson on entropy and entropy changes for thermodynamics students in chemical engineering. There are six different problems with randomized variables.
none;none;students of chemical engineering

EVALUATION OF FUGACITY COEFFICIENTS - MIXTURES
(che50;1979;unpublished)
Robert S Tomaskovic, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana
This lesson describes various methods for evaluation of fugacity coefficients of gas phase mixtures, and introduces solubility of liquids and solids in a dense gas. There are four practice problems.
none;none;chemical engineering students

EVALUATION OF FUGACITY COEFFICIENTS - PURE MATERIALS
(che42;1979;unpublished)
Robert S Tomaskovic, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana
This lesson describes various methods for evaluation of fugacity coefficients of pure gases, liquids, and solids, and is designed for undergraduate thermodynamics students. There are five practice problems.
none;none;chemical engineering students

FLOW MEASURING DEVICES (che35;1979;unpublished)
Michael Gilbert, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana
This lesson demonstrates the operation and utilization of various simple fluid flow measurement devices.
none;none;chemical engineering students

HEAT CONDUCTION (che33;1979;unpublished)
Michael Gilbert, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana
This is a lesson on heat conduction in solid bodies, including resistances in series and in parallel. It is designed for a beginning level heat transfer course in chemical engineering. There are five practice problems.
none;none;chemical engineering students

HEAT TRANSFER COEFFICIENTS (che30;1979;unpublished)
Michael Gilbert, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana
This lesson presents heat transfer, demonstrating the additive resistances in an overall heat transfer coefficient. The estimation of individual coefficients for flow in tubes is also demonstrated. There are five practice problems.
none;none;chemical engineering students

ss35

INTRODUCTION TO HEAT EXCHANGERS (che19;1978;unpublished)
Michael Gilbert, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana
This lesson describes elemental heat exchanger design and the difference between cocurrent and countercurrent operation. The use of the log mean temperature is also demonstrated. Problems for practice are included.
none;none;chemical engineering students

LIQUID-LIQUID EQUILIBRIUM (che36;1978;unpublished)
Charles A Eckert, Timothy T Oberle
Dept. of Chemical Engineering, U of I, Urbana
This lesson provides practice with the calculation and prediction of multicomponent liquid-liquid equilibrium problems.
none;open-ended;chemical engineering students

LIQUID-LIQUID EQUILIBRIUM (che20;1980;unpublished)
Robert S Tomaskovic, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana
This is a lesson on liquid-liquid equilibrium and phase immiscibility designed for thermodynamics students in chemical engineering. Practice problems are included.
touch panel;none;students of chemical engineering

MAXWELL RELATIONSHIPS (che44;1979;unpublished)
Timothy T Oberle, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana
This is a lesson on the thermodynamic Maxwell relationships designed for junior thermodynamics students in chemical engineering. There are six practice problems.
touch panel;none;chemical engineering students

MECHANICAL ENERGY BALANCES PART II: ADVANCED (che24;1978;unpublished)
Michael Gilbert, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana
First of two lessons on mechanical energy balances, this lesson emphasizes situations where the flow is inviscid (Bernoulli's Equation), or where friction is known, as well as the interrelationship of potential energy, kinetic energy, pressure drop and work. Five practice problems are provided.
none;none;students of chemical engineering

MECHANICAL ENERGY BALANCES PART I: ELEMENTARY (che34;1979;unpublished)

Michael Gilbert, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana

Second of two lessons on mechanical energy balances, this lesson deals with a variety of situations involving lost work due to friction, and methods for calculating such effects. Six practice problems are included.

none;none;students of chemical engineering

MOMENTUM - FORCE BALANCES (che46;1981;unpublished)

Robert S Tomaskovic, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana

This lesson involves calculation of various forces using the Momentum - Force Balance. The "vector" nature of momentum and force is brought out by two-dimensional problems. The placement of the "control volume" is used to show when an external solid support force is included in the balance. Five practice problems are included.

none;none;chemical engineering students

PARTIAL MOLAR PROPERTIES AND EXCESS FUNCTIONS (che45;1980;unpublished)

Robert S Tomaskovic, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana

This lesson introduces partial molar properties, property change in mixing, and excess functions. Most of the problems are graphical and make use of the method of intercepts. There are five practice problems.

touch panel;none;chemical engineering students

REFRIGERATION CYCLES AND LIQUEFACTION PROCESSES (che51;1980;unpublished)

Robert S Tomaskovic, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana

This lesson involves the use of various types of diagrams to evaluate important quantities for some typical refrigeration cycles. Two processes for the liquifaction of gases are also studied.

none;none;chemical engineering students

REGULAR SOLUTION THEORY (che31;1979;unpublished)

Timothy T Oberle, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana

This lesson teaches the student about using regular solution theory to find activity coefficients in binary and multicomponent liquid mixtures. There are five practice problems.

none;none;chemical engineering students

ss37

SOLID-LIQUID EQUILIBRIUM (che47;1980;unpublished)
Robert S Tomaskovic, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana
This lesson deals with solid-liquid equilibrium. Both ideal and non-ideal systems are investigated. Regular solution theory is used to predict liquid phase nonideality. The effect of temperature on the heat of fusion, mixed solvents, and freezing point curves are discussed. There are six practice problems.
none;none;chemical engineering students

STEAM I (che43;1979;unpublished)
Timothy T Oberle, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana
This is one of two lessons on using steam tables to evaluate thermodynamics problems. The steam tables used are in IU units (metric). There are five practice problems.
none;none;chemical engineering students

STEAM II (che41;1979;unpublished)
Robert S Tomaskovic, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana
This is the second of two lessons on using steam tables to evaluate thermodynamics problems. The steam tables used are in IU units (metric). There are six practice problems.
none;none;chemical engineering students

THE CORRELATION OF ACTIVITY COEFFICIENTS USING VARIOUS SOLUTIONS TO THE GIBBS-DUHEM EQUATION (che25;1979;unpublished)
Timothy T Oberle, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana
This is a lesson on using various equations to fit binary activity coefficient data, designed for students in a first chemical engineering thermodynamics course. There are six exercises.
none;none;chemical engineering students

THERMODYNAMIC DIAGRAMS (BASIC) (che29;1977,79;unpublished)
Timothy T Oberle, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana
This is a lesson on reading and using various diagrams designed for a sophomore level thermodynamics course in chemical engineering. There are five practice problems.
touch panel;none;chemical engineering students

ss38

VAPOR-LIQUID EQUILIBRIUM AND AZEOTROPES (che40;1979;unpublished)
Timothy T Oberle, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana
This is a lesson on vapor-liquid equilibrium and azeotropes designed for undergraduate students studying thermodynamics and phase equilibrium. There are six practice problems.
none;none;chemical engineering students

Chemical equilibrium

INTRODUCTION TO CHEMICAL EQUILIBRIUM (ka;1973;unpublished)
Ruth Chabay
Chemistry Department, Univeristy of Illinois
This lesson focuses on chemical reactions occurring in solution and in non-solvated systems. Acid-base equilibria are particularly stressed.
none;none;college/university students

LIQUID-LIQUID EQUILIBRIUM (che36;1978;unpublished)
Charles A Eckert, Timothy T Oberle
Dept. of Chemical Engineering, U of I, Urbana
This lesson provides practice with the calculation and prediction of multicomponent liquid-liquid equilibrium problems.
none;open-ended;chemical engineering students

LIQUID-LIQUID EQUILIBRIUM (che20;1980;unpublished)
Robert S Tomaskovic, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana
This is a lesson on liquid-liquid equilibrium and phase immiscibility designed for thermodynamics students in chemical engineering. Practice problems are included.
touch panel;none;students of chemical engineering

SOLID-LIQUID EQUILIBRIUM (che47;1980;unpublished)
Robert S Tomaskovic, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana
This lesson deals with solid-liquid equilibrium. Both ideal and non-ideal systems are investigated. Regular solution theory is used to predict liquid phase nonideality. The effect of temperature on the heat of fusion, mixed solvents, and freezing point curves are discussed. There are six practice problems.
none;none;chemical engineering students

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This is a lesson on vapor-liquid equilibrium and azeotropes designed for undergraduate students studying thermodynamics and phase equilibrium. There are six practice problems.
none;none;chemical engineering students

Chemical models

Organic chemistry

WOODWARD HOFFMAN RULES (woodhoff;1977;unpublished)
Joe Gajewski, Dan Zweig
Indiana University
This organic chemistry lesson summarizes the Woodward Hoffman rules governing the conservation of orbital symmetry in organic molecules. There are also practice problems.
none;20 minutes;graduate level chemistry students

Chemical reaction, Conditions and laws of

CHEMICAL REACTION EQUILIBRIUM (che39;1979;unpublished)
Robert S Tomaskovic, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana
This lesson provides practice for the student in evaluating equilibrium constants.
none;none;chemical engineering students

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Michael Gilbert, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana
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none;none;students of chemical engineering

ENTROPY EFFECTS (che23;1978,79;unpublished)
Timothy T Oberle, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana
This lesson provides a lesson on entropy and entropy changes for thermodynamics students in chemical engineering. There are six different problems with randomized variables.
none;none;students of chemical engineering

ss40

HEAT CONDUCTION (che33;1979;unpublished)
Michael Gilbert, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana
This is a lesson on heat conduction in solid bodies, including resistances in series and in parallel. It is designed for a beginning level heat transfer course in chemical engineering. There are five practice problems.
none;none;chemical engineering students

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touch panel;none;students of chemical engineering

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Charles A Eckert, Timothy T Oberle
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This lesson provides practice with the calculation and prediction of multicomponent liquid-liquid equilibrium problems.
none;open-ended;chemical engineering students

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Robert S Tomaskovic, Charles A Eckert
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This lesson deals with solid-liquid equilibrium. Both ideal and non-ideal systems are investigated. Regular solution theory is used to predict liquid phase nonideality. The effect of temperature on the heat of fusion, mixed solvents, and freezing point curves are discussed. There are six practice problems.
none;none;chemical engineering students

Chemical reactions

INTRODUCTION TO CHEMICAL EQUILIBRIUM (ks;1973;unpublished)
Ruth Chabay
Chemistry Department, Univeristy of Illinois
This lesson focuses on chemical reactions occurring in solution and in non-solvated systems. Acid-base equilibria are particularly stressed.
none;none;college/university students

Chemistry, Analytic--Qualitative

INTRODUCTION TO MASS SPECTROSCOPY (maspec;1978;unpublished)
Jean Thrasher
Chemistry Department, Indiana University
This lesson provides an introduction to the mass spectrometer and to the interpretation of its graphs for identification of various organic compounds.
none;40 minutes;students of analytical or organic chemistry

Chemistry, General

Chemical equilibrium

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Ruth Chabay
Chemistry Department, Univeristy of Illinois
This lesson focuses on chemical reactions occurring in solution and in non-solvated systems. Acid-base equilibria are particularly stressed.
none;none;college/university students

Chemistry, Organic

Nomenclature and structure

WOODWARD HOFFMAN RULES (woodhoff;1977;unpublished)
Joe Gajewski, Dan Zweig
Indiana University
This organic chemistry lesson summarizes the Woodward Hoffman rules governing the conservation of orbital symmetry in organic molecules. There are also practice problems.
none;20 minutes;graduate level chemistry students

Spectrum analysis

INTRODUCTION TO MASS SPECTROSCOPY (maspec;1978;unpublished)
Jean Thrasher
Chemistry Department, Indiana University
This lesson provides an introduction to the mass spectrometer and to the interpretation of its graphs for identification of various organic compounds.
none;40 minutes;students of analytical or organic chemistry

Chemistry, Organic--Problems, exercises, etc.

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Joe Gajewski, Dan Zweig
Indiana University
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none;20 minutes;graduate level chemistry students

Chemistry, Physical and theoretical

HOW BIG IS AN ATOM? (shull;1974;unpublished)
Harrison Shull
Indiana University
The objective of this lesson is to simulate an experiment by which one might determine the size of an hydrogen atom.
none;30 minutes;freshman chemistry or physics students

Chemistry, Physical and theoretical--Problems, exercises, etc.

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none;none;students of chemical engineering

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none;open-ended;chemical engineering students

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Robert S Tomaskovic, Charles A Eckert
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touch panel;none;students of chemical engineering

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none;none;students of chemical engineering

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Dept. of Chemical Engineering, U of I, Urbana
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none;none;chemical engineering students

Children's literature

KIDLIT 1 (alamo;1982,unpublished)
James D Quisenberry
CIM Dept., Southern Illinois University, Carbondale
This program contains four games based on children's books and their authors, characters, and plots.
none;open-ended;elementary students and teachers

Cholinesterase inhibitors

CHOLINESTERASE (pha06;1981;unpublished)
Darin Brox, D Cook
University of Alberta, Canada

This lesson provides a review of acetylcholinesterase as well as cholinesterase inhibitors. Effects of the compound are related to clinical situations and each section is followed by a short quiz.

touch panel;20 minutes;students of pharmacology

Circle

CIRCLES (circles1;1981;unpublished)
Larry Dornhoff
Dept. of Mathematics, University of Illinois, Urbana

This lesson presents the graphing of circles in the x,y-plane, including the standard form equation of a circle and algebraic methods for obtaining this standard form from other equations of the circle. Exercises are provided.

none;15-30 minutes;high school and college algebra students

CIRCLES AND CYLINDERS (dv143a;1978;unpublished)
Greg Janusz
Danville C. C. School District, Danville, Illinois

This lesson teaches the student about circumference, cylinder volume, and circle area. The student is expected to learn the mathematical formulae presented.

none;none;elementary level students

Cities and towns

SEGREGATION SIMULATION (segregate;1979;unpublished)
Michael R Huybensz
Cornell University Law School, Ithaca, New York

This lesson provides a simulation to illustrate how segregated neighborhoods come into being by way of the active production of segregated circumstances.

touch panel;open-ended;students of law, general

Cities and towns--Planning

COMMUNITY DEVELOPMENT AUTHOR/INSTRUCTOR INFORMATION LESSON (cdcons5;1980;1982)
Terry Alliband, Dane Winberg
Southern Illinois University, Carbondale

This lesson contains an explanation of the scoring and help sequences of the associated community development lessons (cdcons, cdcons2, cdcons3, cdcons4). Also included is a short bibliography of community development literature.

none;10-15 minutes;instructors interested in using the associated community development lessons

Civil procedure

FEDERAL RULE 12 (rule12;1979;unpublished)
Prudence C Abram, Layman E Allen, Arthur R Miller,
John Johnson, Peter B Maggs
University of Michigan / University of Illinois

This law lesson provides an exercise on Federal Rule 12 and related rules. It is designed to aid the student's understanding of the operation of Federal motion practices by way of a simulated case.

none;none;students of law

Climatology

THE SYNOPTIC CODE (synoptic;1981;unpublished)
Valerie Schmid
Laboratory for Atmospheric Research, U of I, Urbana

This introductory lesson provides instruction and practice on decoding the standard symbols on surface weather charts.

none;45 minutes;elementary level meterology students

Coenzymes

RESPIRATORY CHAIN (nevilla;1981;unpublished)
William A Nevill, Ilias Sotos
Indiana University / Purdue University

This lesson discusses the chemical steps which comprise the respiratory chain, and illustrates the chemical reactions of the coenzymes and production of ATP.

none;20 minutes;students of the health sciences

Comma

CAPITALIZING AND USE OF PERIODS AND COMMAS IN QUOTED UTTERANCES (quotes;1979,81;unpublished)
Marguerite Thompson
City Colleges of Chicago

This lesson teaches the student to use capitalization and punctuation in quotations of various kinds.

none;none;composition students

Commercial correspondence

THE BUSINESS LETTER (buslet;1981;unpublished)
Paula Larsen
Southern Illinois University, Carbondale, Illinois

This lesson presents the essential parts of a business letter and where to place them on a page. A quiz is included at the end of the lesson.

touch panel;15-20 minutes;general

Communicable diseases

BUGS AND DRUGS (bnd;1981;unpublished)
Paul Alfille, Dave Tanaka, Michael S Gorback
University of Illinois School of Medicine
This is a medical game of infectious diseases. Players create a character that journeys through the hospital, encountering diseases and other perils and surviving by using clinical knowledge. Players progress from pre-med to attending status, and have the opportunity to propose medical questions for other students to face.
none;open-ended;medical students, physicians and health professionals

Community development

COMMUNITY DEVELOPMENT AUTHOR/INSTRUCTOR INFORMATION LESSON (cdcons5;1980;1982)
Terry Alliband, Dane Winberg
Southern Illinois University, Carbondale
This lesson contains an explanation of the scoring and help sequences of the associated community development lessons (cdcons, cdcons2, cdcons3, cdcons4). Also included is a short bibliography of community development literature.
none;10-15 minutes;instructors interested in using the associated community development lessons

SEGREGATION SIMULATION (segregate;1979;unpublished)
Michael R Huybensz
Cornell University Law School, Ithaca, New York
This lesson provides a simulation to illustrate how segregated neighborhoods come into being by way of the active production of segregated circumstances.
touch panel;open-ended;students of law, general

Commutative law (Mathematics)

INTRODUCTION TO ALGEBRAIC EXPRESSIONS (algexprs;1980;unpublished)
Larry Dornhoff
Dept. of Mathematics, University of Illinois, Urbana
This lesson provides introductory examples and drill in evaluation and simplification of algebraic expressions. Commutative, associative, and distributive laws are discussed, along with cancellation to simplify fractions.
none;15-30 minutes;high school and college algebra students

Computer-assisted instruction

COMPUTERS AND MUSIC INSTRUCTION: A BRIEF SURVEY
(muscai;1978;unpublished)
Gary Wittlich, Jon A Conrad
Indiana University School of Music

This lesson discusses the past, present and future of computer-based music instruction. Topics treated are: the history and some early courseware, a model for an automated music learning center, the National Consortium for Computer-based Music Instruction, and the present state of computer-based music instruction and its needs.

none;30 minutes;music students and instructors; persons interested in CAI/CMI/CBE

Consonants

CONSONANT BLENDS (dv164a;1979;unpublished)
Joan Jamieson, Gregory Maggs
Danville C. C. School District, Danville, Illinois

This lesson presents some cases in which two consonants make one sound. The sounds treated are blends formed with "r" and "l".

touch panel;none;elementary level students

CONSONANT VARIANCE (dv127a;1978;unpublished)
Dirk Grunwald
Danville C. C. School District, Danville, Illinois

This elementary English lesson contains a drill for practicing the variances of consonant pronunciation.

touch panel;none;elementary level students

DIGRAPHS (dv163a;1979;unpublished)
Joan Jamieson, Gregory Maggs
Danville C. C. School District, Danville, Illinois

This lesson presents some cases in which two consonants make one sound. The sounds included are: sh, ch, wh, th, ng, and nk.

touch panel;none;elementary level students

SILENT LETTERS (dv157a;1978;unpublished)
Jeff Kouzmanoff
Danville C. C. School District, Danville, Illinois

This lesson teaches the student about silent letters, why they exist, and how to identify them.

none;none;elementary level students

THREE LETTER BLENDS (dv169a;1979;unpublished)
Joan Jamieson, Mike Hollander
Danville C. C. School District, Danville, Illinois
This lesson presents some cases in which three consonants make one sound. The following sounds are treated: scr, str, spr, thr, spl, and shr.
touch panel;none;elementary level students

Contracts

LEGAL RELATIONS (hohfeld;1979;unpublished)
Charles D Kelso, J Clark Kelso
College of Law, Indiana University
This lesson provides exercises on identifying powers and duties in legal relationships according to Hohfeld's concepts.
none;none;students of law

OFFER AND ACCEPTANCE (offer;1978;unpublished)
Peter B Maggs
College of Law, University of Illinois, Urbana, Ill.
This law lesson presents problems of communication associated with offer and acceptance. The early problems in the lesson introduce a few simple rules and apply them to simple fact situations. As the material is mastered the student may proceed at his or her own pace.
none;none;students of law

Coordinates

ORDERED PAIRS (dv106b;1978;unpublished)
Kevin Seager
Danville C. C. School District, Danville, Illinois
This elementary mathematics lesson presents the X and Y axes and then drills the student on identifying the location of various objects on those axes.
none;none;elementary level students

THE CYLINDRICAL COORDINATE SYSTEM (cyl;1975;unpublished)
David V Meller
Comp.-based Educ. Res. Lab., University of Illinois
This lesson defines terms related to the cylindrical coordinate system and provides space in which the student can practice plotting constant value surfaces in the system.
none;30 minutes;students of electrical engineering

THE RECTANGULAR COORDINATE SYSTEM (rect;1975;unpublished)
David V Meller
Comp.-based Educ. Res. Lab., University of Illinois
This lesson defines terms related to the rectangular coordinate system and provides space in which the student can practice plotting constant value surfaces in the system.
none;35 minutes;students of electrical engineering

THE SPHERICAL COORDINATE SYSTEM (sph;1975;unpublished)
David V Meller
Comp.-based Educ. Res. Lab., University of Illinois
This lesson defines terms related to the spherical coordinate system and provides space in which the student can practice plotting constant value surfaces in the system.
none;45 minutes;students of electrical engineering

Coordinates (Algebra)

FUNCTIONS AND THEIR GRAPHS (funcgraf;1981;unpublished)
Larry Dornhoff
Dept. of Mathematics, University of Illinois, Urbana
This lesson provides definitions, examples, algebraic notation, and graphs of functions. Exercises in the evaluation of functions, including composite functions, are included.
none;25-50 minutes;high school and college algebra students

GRAPHING IN CARTESIAN COORDINATES (graphsl;1981;unpublished)
Larry Dornhoff
Dept. of Mathematics, University of Illinois, Urbana
This lesson provides examples and drill which should enable the algebra student to review and strengthen his or her knowledge of basic graphing in the x,y-plane. Topics treated are plotting of points, the four quadrants, and graphing equations with a table of values.
none;17-35 minutes;high school and college algebra students

Corporation law

CORPORATE DIVIDENDS (dividend;1976;unpublished)
Harry G Henn, Robert C Platt
Cornell University Law School, Ithaca, New York
This lesson in corporate law presents general procedures for solving maximum legal dividend problems.
none;60 minutes;students of law

Counseling

ACT (actii;1981;unpublished)
David C Barnett
Department of Psychology, Iowa State University, Ames

This lesson is designed to train college or university academic advisors in the use of the American College Testing Assessment Profile. The contents are adapted from material by the American College Testing Program. A brief test is offered at the end of the lesson to assess the student's understanding of the material presented.

none;30-45 minutes;college/university academic advisors and high school counselors

COUNSELING PROGRAMS (counsel;1980;unpublished)
Jean Cahn, Edgar Cahn, Jane Kelso, Charles D Kelso, J Clark Kelso
College of Law, Indiana University

This lesson provides exercises which treat the different phases of the lawyer/client relationship and teach important lawyering skills.

none;none;law students

KUDER (kuder;1981;unpublished)
Donald G Zytowski, David C Barnett
Department of Psychology, Iowa State University, Ames

This lesson is designed to train graduate level beginning counseling students in the interpretation and use of the results of the Kuder Occupational Interest Survey, a vocational interest test. A competency test is included to assess the student's mastery of the material.

none;25-30 minutes;graduate students in counseling

Cruelty to children

FAILURE TO DIAGNOSE BATTERED-CHILD SYNDROME
(batter;1978;unpublished)
Allan H Levy
School of Basic Medical Sciences, Univ. of Illinois

This lesson contains the text of an article from the "New England Journal of Medicine". Its purpose is to provide a focus for the discussion of problems in one area of medical ethics. The article, written by William J. Curran, presents a summary of a precedent-setting case involving the responsibilities of physicians in battered-child cases.

none;none;medical students, law students

Cylinder (Mathematics)

CIRCLES AND CYLINDERS (dv143a;1978;unpublished)
Greg Janusz
Danville C. C. School District, Danville, Illinois
This lesson teaches the student about circumference, cylinder volume, and circle area. The student is expected to learn the mathematical formulae presented.
none;none;elementary level students

Cytology

HISTOLOGY: CYTOLOGY QUIZ (cytology;1980;unpublished)
Eric W Jacobson, James A Colgan, W Franklin Hughes
Rush University, Chicago, Illinois
This lesson provides a twenty question cytology quiz with feedback for correct and incorrect answers.
none;20 minutes;first year medical students and students of histology

Days

DAYS OF THE WEEK; YESTERDAY, TODAY, AND TOMORROW (dv156a;1978;unpublished)
Lori Roberts
Danville C. C. School District, Danville, Illinois
This lesson presents the student with the relationships of yesterday, today, and tomorrow.
touch panel;none;elementary level students

THAT TIME OF YEAR (dv167a;1978;unpublished)
Joan Jamieson, Peter Kolodziej, Gregory Maggs
Danville C. C. School District, Danville, Illinois
This primary lesson presents the concepts of days, months, and seasons.
touch panel;none;primary level students

Dependency (Psychology)

THE CONCEPT OF DEPENDENCE (depend;1981;unpublished)
Kathryne Dockstader, Beverly Bernstein,
Janice M Layton
College of Nursing, U of I Med. Center, Chicago, Il.
This lesson helps the student to define dependence, to identify normal dependency needs at various stages of development, and to recognize manifestations of abnormal dependency needs.
none;none;nursing students

Dermatophytes

OPPORTUNISTIC FUNGI: CUTANEOUS AND SUBCUTANEOUS MYCOSES (afungus;1981;unpublished)
Eunice Schuytema, Christine Cherry
Rush University, Chicago, Illinois
This tutorial lesson in medical mycology discusses opportunistic fungi, cutaneous fungi and subcutaneous fungi. Morphology, epidemiology, pathogenesis, clinical syndromes, diagnosis and therapy are presented.
noue;40 minutes;first year medical students and students of microbiology and mycology

Diagnosis

PATIENT ASSESSMENT (ptassess;1980;unpublished)
Richard M Stawicki
Sheppard Air Force Base, Texas
Upon completion of this lesson the student should be able to make subjective and objective observations, given a narrative patient situation, and report them either orally, in writing, or both.
none;none;students of the health sciences

Diesel motor--Fuel system

MULTIPLE PUMP FUEL SYSTEM (chamfps;1981;unpublished)
Al Shaw
Chanute Air Force Base, Illinois
This lesson illustrates and describes the functions of the automotive multiple pump fuel system which is used in many diesel engines.
none;none;persons interested in automobile mechanics

THE VARIABLE SPEED HYDRAULIC GOVERNOR (chagov;1981;unpublished)
Al Shaw
Chanute Air Force Base, Illinois
This lesson discusses the function, construction and operation of the automotive variable speed hydraulic governor.
none;none;persons interested in automobile mechanics

Diet in disease

NUTRITIONAL NEEDS (diets;1980;unpublished)
Richard M Stawicki
Sheppard Air Force Base, Texas
After completing the lesson the student should able to select normal nutritional requirements and describe methods for preparing patients for and assisting with meals.
none;none;students of health sciences

Distillation

DISTILLATION - THE METHOD OF MCCABE-THIELE
(che21;1978;unpublished)
Michael Gilbert, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana

This lesson is set up to solve distillation problems. The user will be asked for the relative volatility, the composition of the streams, the thermal conditions of the feed (q), and the reflux ratio. With this data, the lesson will "step" the student through the McCabe-Thiele method of distillation.

none;none;students of chemical engineering

Distributive law (Mathematics)

INTRODUCTION TO ALGEBRAIC EXPRESSIONS (algexprs;1980;unpublished)
Larry Dornhoff
Dept. of Mathematics, University of Illinois, Urbana

This lesson provides introductory examples and drill in evaluation and simplification of algebraic expressions. Commutative, associative, and distributive laws are discussed, along with cancellation to simplify fractions.

none;15-30 minutes;high school and college algebra students

Diuretics and diuresis

DIURETICS QUIZ (pha22;1974,81;unpublished)
Darin Brox, R M Henderson
University of Alberta, Canada / University of Kansas

This lesson presents ten questions on mercurial and osmotic diuretics and their effectiveness. The student receives feedback on each response.

touch panel;10 minutes;students of pharmacology

Dividends

CORPORATE DIVIDENDS (dividend;1976;unpublished)
Harry G Henn, Robert C Platt
Cornell University Law School, Ithaca, New York

This lesson in corporate law presents general procedures for solving maximum legal dividend problems.

none;60 minutes;students of law

Division

CROSSNUMBER PUZZLES (dv109b;1978;unpublished)
Brian Smith
Danville C. C. School District, Danville, Illinois

This lesson is a crossword puzzle game in which the student fills in the answers to simple arithmetic problems to solve the puzzle.

none;none;elementary level students

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DECIMAL SKILLS III: MULTIPLYING AND DIVIDING DECIMALS (dec3;1978;unpublished)

Errol Magidson
Kennedy-King College, Chicago, Illinois

This lesson teaches the student to find the product of two decimals, insert the decimal point in the product of any two decimals, find the quotient of two numbers where there is a decimal in the dividend, and insert the decimal point in the quotient of two numbers where the divisor is a decimal.

paper and pencil;none;students of basic mathematics, adult education

DECIMAL SKILLS IIIB: DIVIDING DECIMALS (dec3b;1980;unpublished)

Errol Magidson
Kennedy-King College, Chicago, Illinois

This lesson teaches the student to find the quotient of two numbers where there is a decimal in the dividend, and insert the decimal point in the quotient of two numbers where the divisor is a decimal.

paper and pencil;none;students of basic mathematics, adult education

DIVISIBILITY RULES (divr;1980;unpublished)

Errol Magidson
Kennedy-King College, Chicago, Illinois

After completion of this mathematics lesson the student will be able to recognize at a glance whether or not a number is divisible by the most frequent divisors: 2, 3, 5, and 10.

none;none;students of basic mathematics, adult education

FINDING THE GREATEST COMMON DENOMINATOR (gcd;1978;unpublished)

Errol Magidson
Kennedy-King College, Chicago, Illinois

This mathematics lesson provides instruction and practice in finding the greatest common denominator.

none;none;students of basic mathematics, adult education

NUMBER WARS (dv108b;1978;unpublished)

Dirk Grunwald
Danville C. C. School District, Danville, Illinois

With a "space war" scenario, this lesson offers the student practice in addition, subtraction, multiplication and division problems.

none;none;elementary level students

WELCOME TO BLOKIT (dvl10b;1978;unpublished)
Damon Scaggs
Danville C. C. School District, Danville, Illinois
This is a mathematics game of Bingo in which the student tries to get four numbers in a row on the playing card by using combinations of two dice rolls given by the computer.
none;none;elementary level students

WELCOME TO SUM-THING (dvl15b;1978;unpublished)
Ken Metheny
Danville C. C. School District, Danville, Illinois
This elementary math drill gives the student a block of numbers and asks the student to pick two adjacent numbers that equal the desired value.
touch panel;none;elementary level students

Drugs

COMMONLY USED DRUGS (comdrug;1980;unpublished)
Thomas Smith
Sheppard Air Force Base, Texas
After completing this lesson the student will be able to differentiate the actions and uses, routes of administration, complications, and contraindications of commonly used anti-infective agents, analgesics, sedatives, antihistamines, and anti-depressants.
none;none;students of the health sciences

Drugs--Dosage--Problems, exercises, etc.

THE MATHEMATICS OF DOSAGES (gnmath;1980,81;1982)
Mathematics Module Committee, Richard S Trynda,
Larry Kemp
College of Nursing, U of I Med. Center, Chicago, Il.
In this lesson the student will learn to compute dosages for tablets, injections and intravenous medication, convert metric units to apothecary or English units and vice versa, calculate the drip rate per minute and solution rate per hour for intravenous fluids, and apply the acquired knowledge and skills to clinical situations.
none;none;nursing students

Editor programs

PLATO

-USE- COMMAND EDITOR (usedit;1981;unpublished)
Paul Alfille
University of Illinois School of Medicine
This lesson allows the user to create a list of TUTOR -use- commands in a common or nameset/dataset by displaying the list of blocks in the desired lesson. Single lesson or multiple lesson -use- formats can be created.
none;open-ended;PLATO authors

Education--Aims and objectives

FOUNDATIONS OF EDUCATION (edfnds;1982;unpublished)
Robert N Barger
Eastern Illinois University, Charleston, Illinois
This lesson provides an introduction to the areas of concern in the interdisciplinary field known as Foundations of Education.
none;15-20 minutes;undergraduate students

Education, Elementary

IGE SCHOOLS (dv112b;1978;unpublished)
Stephen Gray
Danville C. C. School District, Danville, Illinois
This lesson is intended for teachers and presents a discussion of individually guided education.
none;none;general; teachers

Educational games

Arithmetic

BINGO MATH (dv135b;1978;unpublished)
Stephen Gray
Danville C. C. School District, Danville, Illinois
This program provides an elementary mathematics bingo game. In order to fill in a space on the bingo "card", the student must solve a simple math problem.
touch panel;open-ended;elementary level students

CROSSNUMBER PUZZLES (dv109b;1978;unpublished)
Brian Smith
Danville C. C. School District, Danville, Illinois
This lesson is a crossword puzzle game in which the student fills in the answers to simple arithmetic problems to solve the puzzle.
none;none;elementary level students

GREATER THAN, EQUAL TO, AND LESS THAN (dv123a;1978;unpublished)
Stephen Gray
Danville C. C. School District, Danville, Illinois
This elementary lesson teaches children to use the arithmetic symbols meaning greater than (>), equal to (=), and less than (<). A game is included for practice.
touch panel;none;elementary level students

LILYPOND (lilypond;1976,82;unpublished)
Silas Warner, Brent R Sweeny
Indiana University
This math lesson provides a practice game for exponentials. After seeing an example of exponential growth of lilies in a pond, the student has the opportunity to change the parameters governing the rate of growth, and guess the outcome.
none;30 minutes;general

MATH KINGDOM (dvldung;1978;unpublished)
Greg Janusz, Andy Wiese
Danville C. C. School District, Danville, Illinois
This program provides a mathematical "dungeon" game in which the student moves around in a maze, answering math questions in order to "kill" monsters and build a strong dungeon character.
none;none;elementary level students

MATH MAZE, A LESSON ON ADDING FRACTIONS (dv147b;1978;unpublished)
Stephen Gray
Danville C. C. School District, Danville, Illinois
This game requires that the student solve fraction problems in order to make his or her way across a maze.
touch panel;none;elementary level students

MATH WORDS (dv138b;1978;unpublished)
Stephen Gray
Danville C. C. School District, Danville, Illinois
In this elementary level lesson the student answers math problems to solve a cryptographical problem.
none;open-ended;elementary level students

MAZE RACE (dv170a;1980;unpublished)
Gregory Maggs
Danville C. C. School District, Danville, Illinois
This game requires that the student solve mathematics problems in order to make his or her way across a maze.
none;none;elementary level students

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NUMBER WARS (dv108b;1978;unpublished)
Dirk Grunwald
Danville C. C. School District, Danville, Illinois
With a "space war" scenario, this lesson offers the student practice in addition, subtraction, multiplication and division problems.
none;none;elementary level students

PRIME NUMBERS (dv144b;1978;unpublished)
Dirk Grunwald
Danville C. C. School District, Danville, Illinois
This elementary lesson teaches the student about prime numbers and how to identify them. There is also a game section in which the student must "trap" aliens marked with prime numbers.
none;none;elementary level students

SEA BATTLE (battleship;1975-78;1982)
Graph. Strand Elem. Math. Group
U of I NSF Elem. Math Group, Urbana, Ill.
This is an on-line version of the game, Battleship, in which the object of the game is to shoot at and sink the opponent's ships on the board. The user plays against the computer, and fires by plotting points on the graph.
none;open-ended;elementary mathematics students

SUBTRACTION WITH TANKS (dv117b;1978;unpublished)
Dirk Grunwald
Danville C. C. School System, Danville, Illinois
This elementary lesson teaches subtraction by way of an animated tank game.
none;none;elementary level students

THE CLOCK AND BOMB (dv171a;1980;unpublished)
Gregory Maggs
Danville C. C. School District, Danville, Illinois
In this elementary math game the student answers math questions in a race against a bomb or a clock.
none;none;elementary level students

WELCOME TO BLOKIT (dv110b;1978;unpublished)
Damon Scaggs
Danville C. C. School District, Danville, Illinois
This is a mathematics game of Bingo in which the student tries to get four numbers in a row on the playing card by using combinations of two dice rolls given by the computer.
none;none;elementary level students

Business

THE KINGDOM OF SANTA PARAVIA (santapar;1981;unpublished)
Rob Kolstad, Walter Brooks
University of Illinois

This lesson simulates the kingdom of Santa Paravia, a monarchy in which several competing rulers attempt to maximize their kingdom's strength. Each user works his/her way through the ranks of royalty while learning management techniques for land, manpower, technology and finances. An extensive HELP section is available.

none;open-ended;5th grade and up

Medicine

BUGS AND DRUGS (bnd;1981;unpublished)
Paul Alfille, Dave Tanaka, Michael S Gorback
University of Illinois School of Medicine

This is a medical game of infectious diseases. Players create a character that journeys through the hospital, encountering diseases and other perils and surviving by using clinical knowledge. Players progress from pre-med to attending status, and have the opportunity to propose medical questions for other students to face.

none;open-ended;medical students, physicians and health professionals

Motor bus lines

DIAL-A-BUS (busline1;1973,76;unpublished)
Silas Warner
Indiana University

This lesson is a simple transportation model. The user is challenged to route a bus in the most efficient way, measured ultimately by how much money is made and how many customers are happy with the service.

none;open-ended;general and students of economics or transportation

Nursing

PUZZLE 2 (puzzle2;1977;unpublished)
Sherry Gordon, Jeff Ruffner
Parkland College, Champaign, Illinois

This lesson contains a crossword puzzle of nursing terms.

none;open-ended;nursing students

ss60

WELCOME TO TIC TAC TOE (tic;1982;unpublished)
C Staatse, Sherry Gordon, Jan Predmore
Parkland College, Champaign, Illinois
This is a tic-tac-toe game in which the student answers nursing questions on labor and delivery.
touch panel;open-ended;nursing students

Reading

KIDLIT 1 (alamo;1982;unpublished)
James D Quisenberry
CIM Dept., Southern Illinois University, Carbondale
This program contains four games based on children's books and their authors, characters, and plots.
none;open-ended;elementary students and teachers

SPACE VOYAGE (dv155a;1978;unpublished)
Lucille Gallegos-Jaramillo, Don Gillies
Danville C. C. School District, Danville, Illinois
This lesson presents twenty story problems to test a student's reading ability. Short paragraphs are presented and the student is expected to answer questions about the paragraphs.
touch panel;none;elementary level students

Waterfowl management

MISSISSIPPI VALLEY CANADIAN GOOSE POPULATION (duck;1981;unpublished)
Dennis Gruner
Southern Illinois University, Carbondale, Illinois
This is a simulation game on waterfowl management, presenting some of the problems and decisions of a waterfowl manager.
none;none;persons interested in waterfowl management

Word games

SCRAMBLED WORDS (dv139b;1978;unpublished)
Bruce Maggs
Danville C. C. School District, Danville, Illinois
This program contains scrambled word puzzles, each one of them having a "theme".
none;open-ended;elementary level students

WORDFINDS (dv131b;1978;unpublished)
Bruce Maggs
Danville C. C. School District, Danville, Illinois
This program provides several computer "wordfind" games. Each wordfind game has a theme and by means of a cursor the user indicates to the computer that a word has been found.
none;open-ended;elementary level students

Educational statistics

STATISTICS FOR TEACHERS (milton;1981;unpublished)
James Maedke
Southern Illinois University, Carbondale, Illinois
This lesson discusses simplified statistics which aid in effective student evaluation. Practice exercises are provided.
none;none;teachers

Eigenvalues

MATRIX ROUTINES (matrix;1973;unpublished)
Carol D Bennett
Physics Department, University of Illinois
This program provides matrix routines for eigenvalues and eigenvectors of symmetric matrices and for solutions to simultaneous linear algebraic equations.
none;open-ended;students of classical mechanics, elementary physics

Electric circuits

UNIT STEP FUNCTION (uaee4;1975;unpublished)
Jonathan Kent
University of Arizona, Tuscon
This lesson discusses the step-function as a switch, defines the unit-step-function, lists linear combinations of steps, provides a function plotter for practice, and drill problems.
none;none;junior level electrical engineering students

Electric engineering

ELECTRICAL ENGINEERING INDEX (uieeindex;1975;unpublished)
David V Meller
Comp.-based Ed. Res. Lab., University of Illinois
This program provides an index to electrical engineering lessons.
none;none;students of electrical engineering

LINEAR CONGRUENTIAL RANDOM NUMBER GENERATOR (rng;1976;unpublished)
David V Meller
Comp.-based Educ. Res. Lab., University of Illinois
By setting parameters the student can generate linear congruential random numbers and perform three different statistical tests.
none;open-ended;students of electrical engineering

THE CYLINDRICAL COORDINATE SYSTEM (cyl;1975;unpublished)
David V Meller
Comp.-based Educ. Res. Lab., University of Illinois
This lesson defines terms related to the cylindrical coordinate system and provides space in which the student can practice plotting constant value surfaces in the system.
none;30 minutes;students of electrical engineering

THE RECTANGULAR COORDINATE SYSTEM (rect;1975;unpublished)
David V Meller
Comp.-based Educ. Res. Lab., University of Illinois
This lesson defines terms related to the rectangular coordinate system and provides space in which the student can practice plotting constant value surfaces in the system.
none;35 minutes;students of electrical engineering

THE SPHERICAL COORDINATE SYSTEM (sph;1975;unpublished)
David V Meller
Comp.-based Educ. Res. Lab., University of Illinois
This lesson defines terms related to the spherical coordinate system and provides space in which the student can practice plotting constant value surfaces in the system.
none;45 minutes;students of electrical engineering

UNIT STEP FUNCTION (uaee4;1975;unpublished)
Jonathan Kent
University of Arizona, Tuscon
This lesson discusses the step-function as a switch, defines the unit-step-function, lists linear combinations of steps, provides a function plotter for practice, and drill problems.
none;none;junior level electrical engineering students

Electric engineering--Materials

DIFFUSION PROFILE PLOTTER (difplot;1976;unpublished)
Dale R Sinder
Dept. of Electrical Engineering, U of I, Urbana
This lesson computes and plots diffusion profiles for six different dopants in silicon.
none;open-ended;students of electrical engineering

Electric engineering--Mathematics

UNIT STEP FUNCTION (uaee4;1975;unpublished)
Jonathan Kent
University of Arizona, Tuscon
This lesson discusses the step-function as a switch, defines the unit-step-function, lists linear combinations of steps, provides a function plotter for practice, and drill problems.
none;none;junior level electrical engineering students

Electronic digital computers--Circuits

SWITCHES (lou;1980;unpublished)
Louis Sigety
Indiana University
This introductory lesson provides a discussion and demonstration of the way the internal switches in the DEC System 10 work.
none;20 minutes;DEC System 10 users

English language

Composition and exercises

A BASIC PATTERN FOR WRITING PARAGRAPHS (basicp;1976,77;unpublished)
Rita Silveri
City Colleges of Chicago
This lesson defines the concept of paragraph and instructs the student in the development of a good paragraph.
none;none;students of basic English

CAPITALIZING AND USE OF PERIODS AND COMMAS IN QUOTED UTTERANCES (quotes;1979,81;unpublished)
Marguerite Thompson
City Colleges of Chicago
This lesson teaches the student to use capitalization and punctuation in quotations of various kinds.
none;none;composition students

INTRODUCTION TO ESSAY WRITING: CAUSE-EFFECT WRITING (eap2;1977;unpublished)
Pat Porter, Russell Serpetis, Melanie Wozniak, Bob Little
University of Illinois, Chicago Circle
This lesson teaches the student to write an effective essay showing cause and effect.
none;none;students of composition

INTRODUCTION TO ESSAY WRITING: ARGUMENTATIVE WRITING (eapl;1977;unpublished)
Pat Porter, Russell Serpetis, Melanie Wozniak, Bob Little
University of Illinois, Chicago Circle
This lesson teaches the student to write an effective argumentative essay.
none;none;students of composition

OUTLINING TO PREPARE FOR WRITING COMPOSITIONS
(outline1;1979;unpublished)
Rita Silveri, Peter Zelchenko
Chicago City Colleges
This lesson teaches the student to use outlines to plan and organize for composition writing.
none;none;composition students

PARAGRAPH ORGANIZATION (par;1982;unpublished)
William Bloemer, Norman Hinton, William Ochs,
Chris P Hinton
Sangamon State University, Springfield, Illinois
This lesson presents "scrambled" paragraphs, and the student must indicate the original order of the sentences. Each paragraph may be redone, but in each case the student is asked several questions to see if he or she understands the organizational principles that motivated the original author.
none;10-30 minutes, depending on work selected;students of English, grammar, composition

PRACTICE IN REPAIRING SENTENCE FRAGMENTS (iusentex;1979,80;unpublished)
Brent R Sweeny
English Department, Indiana University
In this lesson the student must identify and correct, in paragraph-editing style, 18 sentence-fragment problems. These problems include: missing verb or subject, dependent clause cut off from independent clause, and comma splice.
none;15-20 minutes;basic English students

RHETORIC LESSON INDEX (rhetind;1980;unpublished)
Richard C Burke
Department of English, University of Illinois, Urbana
This file contains an index to PLATO lessons on composition.
none;none;composition students

SEMICOLONS: THEIR GRAMMATICAL AND STYLISTIC FUNCTIONS
(uisemi;1980;unpublished)
Michael Packert-Hall, Richard C Burke
Department of English, University of Illinois, Urbana
This lesson provides instruction and practice on the grammatical and stylistic functions of semicolons.
none;none;students of English

WORD PAIRS DIAGNOSTIC (eldw;1978;unpublished)
Errol Magidson, James M Kraatz
Kennedy-King College, Chicago, Illinois
This lesson provides a diagnostic test in word pairs. The student is presented with a series of 48 sentences in 48 categories, and must select the correct words from the items in parentheses.
none;30 minutes;students of English, adult education

Grammar

ENGLISH VERB INFLECTION (dv148b;1978;unpublished)
Joan Friedenberg, Stephen Gray
Danville C. C. School District, Danville, Illinois
This elementary English lesson provides practice in correctly forming the verb "to be".
touch panel;none;elementary level students

HOMONYM DRILLS (dv121a;1978;unpublished)
Don Gillies
Danville C. C. School District, Danville, Illinois
This lesson defines homonyms as words that sound alike but are spelled differently. Drills are provided for student practice.
touch panel;none;elementary level students

PLURALS (dv134a;1978;unpublished)
Stephen Gray
Danville C. C. School District, Danville, Illinois
This elementary English lesson provides practice with identifying and using plural nouns.
none;none;elementary level students

PRACTICE IN REPAIRING SENTENCE FRAGMENTS (iusentex;1979,80;unpublished)
Brent R Sweeny
English Department, Indiana University
In this lesson the student must identify and correct, in paragraph-editing style, 18 sentence-fragment problems. These problems include: missing verb or subject, dependent clause cut off from independent clause, and comma splice.
none;15-20 minutes;basic English students

THE PAST TENSE (dv154a;1978;unpublished)
Lori Roberts, Lindsay Reichmann
Danville C. C. School District, Danville, Illinois
This lesson teaches the student how to put words in the past tense and when to use them.
touch panel;none;elementary level students

USING POSSESSIVES (dv129a;1978;unpublished)
Don Gillies
Danville C. C. School District, Danville, Illinois
This elementary English lesson defines possessive nouns and pronouns and teaches the student to use them correctly. A game is included for practice.
touch panel;none;elementary level students

VERBS: THE PAST PERFECT TENSE (pastp;1975,76;unpublished)
Rita Silveri
City Colleges of Chicago
This lesson provides explanation of and exercises using the past perfect tense.
none;none;students of basic English

WORD PAIRS DIAGNOSTIC (eldw;1978;unpublished)
Errol Magidson, James M Kraatz
Kennedy-King College, Chicago, Illinois
This lesson provides a diagnostic test in word pairs. The student is presented with a series of 48 sentences in 48 categories, and must select the correct words from the items in parentheses.
none;30 minutes;students of English, adult education

Orthography and spelling

FLASHER -- A SPELLING DRILL (flasher;1981;unpublished)
Dan Potter
Learning Skills Center, Indiana University
This lesson provides four lists of 64 commonly-misspelled words from which 32 are selected for each quiz. The lesson may also be used as a processor lesson whereby an instructor may set up his or her own spelling drill.
none;open-ended;general

WORD POWER - SPELLING (voclsp;1975-80;unpublished)
Richard T Scanlan, Michael S Vollmer,
David M Slayton
Classics Department, University of Illinois
Six lessons present spelling rules and provide intensive spelling practice.
none;approximately 50 minutes for each lesson;college/university students

Pronunciation

"OO" SOUNDS (dv160a;1978;unpublished)
Joan Jamieson, Mike Hollander
Danville C. C. School District, Danville, Illinois
This lesson teaches the student to differentiate between the different "oo" sounds.
touch panel;none;elementary level students

CONSONANT VARIANCE (dv127a;1978;unpublished)
Dirk Grunwald
Danville C. C. School District, Danville, Illinois
This elementary English lesson contains a drill for practicing the variances of consonant pronunciation.
touch panel;none;elementary level students

LONG "OO" AND SHORT "OO" (dv107a;1978;unpublished)
Greg Janusz
Danville C. C. School District, Danville, Illinois
This lesson teaches the student to identify a long or short "oo" sound in various words.
touch panel;none;elementary level students

SILENT LETTERS (dv157a;1978;unpublished)
Jeff Kouzmanoff
Danville C. C. School District, Danville, Illinois
This lesson teaches the student about silent letters, why they exist, and how to identify them.
none;none;elementary level students

VOWEL SOUNDS (dv124b;1978;unpublished)
Greg Janusz
Danville C. C. School District, Danville, Illinois
This elementary lesson presents fifteen words and the student must distinguish among the sounds "a" as in draw, "a" as in part, and "u" as in fur.
touch panel;none;elementary level students

Punctuation

APOSTROPHES (dv153a;1978;unpublished)
Joan Jamieson, Joan Friedenberg
Danville C. C. School District, Danville, Illinois
This lesson teaches the student how and when to use an apostrophe in a sentence.
touch panel;none;elementary level students

CAPITALIZING AND USE OF PERIODS AND COMMAS IN QUOTED UTTERANCES (quotes;1979,81;unpublished)
Marguerite Thompson
City Colleges of Chicago
This lesson teaches the student to use capitalization and punctuation in quotations of various kinds.
none;none;composition students

SEMICOLONS: THEIR GRAMMATICAL AND STYLISTIC FUNCTIONS (uisemi;1980;unpublished)
Michael Packert-Hall, Richard C Burke
Department of English, University of Illinois, Urbana
This lesson provides instruction and practice on the grammatical and stylistic functions of semicolons.
none;none;students of English

Word formation

WORD POWER - SPELLING (voclsp;1975-80;unpublished)
Richard T Scanlan, Michael S Vollmer, David M Slayton
Classics Department, University of Illinois
Six lessons present spelling rules and provide intensive spelling practice.
none;approximately 50 minutes for each lesson;college/university students

English language--Alphabeting

WORDS IN ALPHABETICAL ORDER (dv114a;1978;unpublished)
Andy Wiese
Danville C. C. School District, Danville, Illinois
This lesson teaches the student to alphabetize words.
touch panel;none;elementary level students

English language--Consonants

CONSONANT BLENDS (dv164a;1979;unpublished)
Joan Jamieson, Gregory Maggs
Danville C. C. School District, Danville, Illinois
This lesson presents some cases in which two consonants make one sound. The sounds treated are blends formed with "r" and "l".
touch panel;none;elementary level students

CONSONANT VARIANCE (dv127a;1978;unpublished)
Dirk Grunwald
Danville C. C. School District, Danville, Illinois
This elementary English lesson contains a drill for practicing the variances of consonant pronunciation.
touch panel;none;elementary level students

DIGRAPHS (dv163a;1979;unpublished)
Joan Jamieson, Gregory Maggs
Danville C. C. School District, Danville, Illinois
This lesson presents some cases in which two consonants make one sound. The sounds included are: sh, ch, wh, th, ng, and nk.
touch panel;none;elementary level students

SILENT LETTERS (dv157a;1978;unpublished)
Jeff Kouzmanoff
Danville C. C. School District, Danville, Illinois
This lesson teaches the student about silent letters, why they exist, and how to identify them.
none;none;elementary level students

THREE LETTER BLENDS (dv169a;1979;unpublished)
Joan Jamieson, Mike Hollander
Danville C. C. School District, Danville, Illinois
This lesson presents some cases in which three consonants make one sound. The following sounds are treated: scr, str, spr, thr, spl, and shr.
touch panel;none;elementary level students

English language--Diphthongs

DIPHTHONGS (dv126a;1978;unpublished)
Stephen Gray
Danville C. C. School District, Danville, Illinois
This elementary English lesson provides a drill for practice using diphthongs.
touch panel;none;elementary level students

English language--Homonyms

HOMONYM DRILLS (dv121a;1978;unpublished)
Don Gillies
Danville C. C. School District, Danville, Illinois
This lesson defines homonyms as words that sound alike but are spelled differently. Drills are provided for student practice.
touch panel;none;elementary level students

ss70

English language--Middle English, 1100-1500

CHAUCER'S ENGLISH II: HISTORY AND INFLECTIONS (waste2;1980;unpublished)
Norman Hinton
Sangamon State University, Springfield, Illinois
This lesson is second in a series of five lessons in reading 14th century Middle English designed for students preparing to study Chaucer's "Canterbury Tales". The subjects of this lesson are history and inflections.
none;none;college and university students

CHAUCER'S ENGLISH III: IDIOMS (waste3;1980;unpublished)
Norman Hinton
Sangamon State University, Springfield, Illinois
This lesson is third in a series of five lessons in reading 14th century Middle English designed for students preparing to study Chaucer's "Canterbury Tales". Idioms are discusses in this part.
none;none;college and university students

CHAUCER'S ENGLISH IV: SYNTAX AND STYLE (waste4;1980;unpublished)
Norman Hinton
Sangamon State University, Springfield, Illinois
This lesson is fourth in a series of five lessons in reading 14th century Middle English designed for students preparing to study Chaucer's "Canterbury Tales". The subjects of this lesson are syntax and style.
none;none;college and university students

CHAUCER'S ENGLISH V: VOCABULARY DRILL (waste5;1980;unpublished)
Norman Hinton
Sangamon State University, Springfield, Illinois
This lesson is last in a series of five lessons in reading 14th century Middle English designed for students preparing to study Chaucer's "Canterbury Tales". A vocabulary drill is contained in this lesson.
none;none;college and university students

English language--Parts of speech

PARTS OF SPEECH: ADJECTIVES (dv173a;1978;unpublished)
Lindsay Reichmann
Danville C. C. School District, Danville, Illinois
This elementary lesson illustrates adjectives and then drills the student on his or her understanding.
optional touch panel;none;elementary level students

English language--Phonetics

"OO" SOUNDS (dv160a;1978;unpublished)
Joan Jamieson, Mike Hollander
Danville C. C. School District, Danville, Illinois
This lesson teaches the student to differentiate between the different "oo" sounds.
touch panel;none;elementary level students

CONSONANT BLENDS (dv164a;1979;unpublished)
Joan Jamieson, Gregory Maggs
Danville C. C. School District, Danville, Illinois
This lesson presents some cases in which two consonants make one sound. The sounds treated are blends formed with "r" and "l".
touch panel;none;elementary level students

DIGRAPHS (dv163a;1979;unpublished)
Joan Jamieson, Gregory Maggs
Danville C. C. School District, Danville, Illinois
This lesson presents some cases in which two consonants make one sound. The sounds included are: sh, ch, wh, th, ng, and nk.
touch panel;none;elementary level students

THREE LETTER BLENDS (dv169a;1979;unpublished)
Joan Jamieson, Mike Hollander
Danville C. C. School District, Danville, Illinois
This lesson presents some cases in which three consonants make one sound. The following sounds are treated: scr, str, spr, thr, spl, and shr.
touch panel;none;elementary level students

English language--Syllabication

WORD DIVISION (dv103a;1978;unpublished)
Stephen Gray
Danville C. C. School District, Danville, Illinois
This lesson presents the grammatical rules for word division and provides the student with extensive drilling.
optional touch panel;none;elementary level students

English language--Synonyms and antonyms

SAME, OPPOSITE, AND DIFFERENT (dv161a;1978;unpublished)
Mike Hollander
Danville C. C. School District, Danville, Illinois
This elementary lesson discusses the concepts of same, opposite, and different.
touch panel;none;elementary level students

English language--Usage

MULTIPLE MEANINGS (dv128a;1978;unpublished)
Kevin Seager
Danville C. C. School District, Danville, Illinois
This elementary English lesson provides drills to test the student's ability to distinguish between the multiple meanings of words.
touch panel;none;elementary level students

English language--Usage--Testing

WORD PAIRS DIAGNOSTIC (eldw;1978;unpublished)
Errol Magidson, James M Kraatz
Kennedy-King College, Chicago, Illinois
This lesson provides a diagnostic test in word pairs. The student is presented with a series of 48 sentences in 48 categories, and must select the correct words from the items in parentheses.
none;30 minutes;students of English, adult education

English language--Vowels

LONG AND SHORT VOWEL SOUNDS (dv151a;1978;unpublished)
Don Gillies
Danville C. C. School District, Danville, Illinois
This primary lesson provides 32 separate drills that test the student's ability to match vowel sounds through pictures.
touch panel;none;primary level students

VOWEL IDENTIFICATION (dv105b;1978;unpublished)
Don Gillies
Danville C. C. School District, Danville, Illinois
This is a short drill lesson that requires the student to fill in missing vowels according to the pictures displayed with the incomplete words. It is intended for use by students just beginning to read.
optional touch panel;none;beginning reading students

VOWEL SOUNDS (dv124b;1978;unpublished)
Greg Janusz
Danville C. C. School District, Danville, Illinois
This elementary lesson presents fifteen words and the student must distinguish among the sounds "a" as in draw, "a" as in part, and "u" as in fur.
touch panel;none;elementary level students

English literature--Middle English, 1100-1500

CHAUCER'S ENGLISH II: HISTORY AND INFLECTIONS
(waste2;1980;unpublished)
Norman Hinton
Sangamon State University, Springfield, Illinois
This lesson is second in a series of five lessons in reading 14th century Middle English designed for students preparing to study Chaucer's "Canterbury Tales". The subjects of this lesson are history and inflections.
none;none;college and university students

CHAUCER'S ENGLISH III: IDIOMS (waste3;1980;unpublished)
Norman Hinton
Sangamon State University, Springfield, Illinois
This lesson is third in a series of five lessons in reading 14th century Middle English designed for students preparing to study Chaucer's "Canterbury Tales". Idioms are discusses in this part.
none;none;college and university students

CHAUCER'S ENGLISH IV: SYNTAX AND STYLE
(waste4;1980;unpublished)
Norman Hinton
Sangamon State University, Springfield, Illinois
This lesson is fourth in a series of five lessons in reading 14th century Middle English designed for students preparing to study Chaucer's "Canterbury Tales". The subjects of this lesson are syntax and style.
none;none;college and university students

CHAUCER'S ENGLISH V: VOCABULARY DRILL (waste5;1980;unpublished)
Norman Hinton
Sangamon State University, Springfield, Illinois
This lesson is last in a series of five lessons in reading 14th century Middle English designed for students preparing to study Chaucer's "Canterbury Tales". A vocabulary drill is contained in this lesson.
none;none;college and university students

Enthalpy

ADVANCED THERMODYNAMIC DIAGRAMS (che26;1977,78,79;unpublished)
Timothy T Oberle, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana
This is a lesson on reading and using various diagrams designed for a junior level thermodynamics course in chemical engineering. There are six practice problems.
touch panel;none;chemical engineering students

THERMODYNAMIC DIAGRAMS (BASIC) (che29;1977,79;unpublished)
Timothy T Oberle, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana
This is a lesson on reading and using various diagrams designed for a sophomore level thermodynamics course in chemical engineering. There are five practice problems.
touch panel;none;chemical engineering students

Entropy

ADVANCED THERMODYNAMIC DIAGRAMS (che26;1977,78,79;unpublished)
Timothy T Oberle, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana
This is a lesson on reading and using various diagrams designed for a junior level thermodynamics course in chemical engineering. There are six practice problems.
touch panel;none;chemical engineering students

ENTROPY EFFECTS (che23;1978,79;unpublished)
Timothy T Oberle, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana
This lesson provides a lesson on entropy and entropy changes for thermodynamics students in chemical engineering. There are six different problems with randomized variables.
none;none;students of chemical engineering

Equations

ABSOLUTE VALUE (absvalue;1981;unpublished)
Larry Dornhoff
Dept. of Mathematics, University of Illinois, Urbana
This lesson provides examples and exercises in the evaluation of expressions involving absolute value, and algebraic solution of equations and inequalities involving absolute value.
none;17-35 minutes;high school and college algebra students

GRAPHS OF STRAIGHT LINES (linegraf;1981;unpublished)
Larry Dornhoff
Dept. of Mathematics, University of Illinois, Urbana
This lesson presents graphing of straight lines in the x,y-plane. Definitions, examples, and exercises involving the slope formula, point-slope and slope-intercept equations, and parallel and perpendicular lines are included.
none;15-30 minutes;high school and college algebra students

LINEAR EQUATIONS IN ONE VARIABLE (lineqs;1981;unpublished)
Larry Dornhoff
Dept. of Mathematics, University of Illinois, Urbana
This lesson provides worked examples and student drill in the algebraic solution of linear equations in one variable. Also introduced are word problems which can be solved with similar methods.
none;15-30 minutes;high school and college algebra students

MISCELLANEOUS EQUATIONS (eqsolve;1981;unpublished)
Larry Dornhoff
Dept. of Mathematics, University of Illinois, Urbana
This lesson contains exercises in the algebraic solution of equations involving square roots, or equations which become quadratic equations after an appropriate substitution.
none;17-35 minutes;high school and college algebra students

Existentialism

COMPARATIVE PHILOSOPHY (phil1;1980;unpublished)
Jerry W Joplin, Emil R Spees
Southern Illinois University, Carbondale, Illinois
This is an introductory course in philosophy for students who are interested in learning the relevancy of philosophy to their given subject matter.
none;none;persons interested in comparative philosophy

Eye--Diseases and defects

RETROLENTAL FIBROPLASIA, BLINDNESS CAUSED BY OXYGEN THERAPY (rlf;1982;unpublished)
Robert J Smith
School of Basic Medical Sciences, U of I, Urbana
This lesson discusses the etiology, developmental processes, treatment, and prevention of retrolental fibroplasia. The mechanics section has graphic representations of the progressive disfiguration of the retina which is the outstanding characteristic of this disorder. Periodic questions are asked to assist the student in the retention of key points.
none;20 minutes;first and second year students of medicine

Factors (Algebra)

FINDING THE LEAST COMMON MULTIPLE OF ALGEBRAIC EXPRESSIONS (math951;1978;unpublished)
Richard Neapolitan
Chicago City Colleges
This lesson teaches the student to find the least common multiple of algebraic expressions. Practice problems are included.
none;none;elementary algebra students, adult education

FUNCTIONS AND THEIR GRAPHS (funcgraf;1981;unpublished)
Larry Dornhoff
Dept. of Mathematics, University of Illinois, Urbana
This lesson provides definitions, examples, algebraic notation, and graphs of functions. Exercises in the evaluation of functions, including composite functions, are included.
none;25-50 minutes;high school and college algebra students

POLYNOMIALS (polynoms;1981;unpublished)
Larry Dornhoff
Dept. of Mathematics, University of Illinois, Urbana
This lesson introduces algebraic polynomials, including terms, coefficients, degrees, and evaluation of polynomials. Exercises in the addition, subtraction, multiplication, and division of polynomials are provided, as well as exercises in short-cut "synthetic division" by divisors of the form "x - a".
none;35-70 minutes;high school and college algebra students

REDUCING ALGEBRAIC FRACTIONS (math95g;1978;unpublished)
Richard Neapolitan
Chicago City Colleges
This lesson teaches the student to reduce algebraic fractions to the lowest possible terms. Practice problems are included.
none;none;elementary algebra students, adult education

Fallacies (Logic)

LOGIC: FALLACIES (fall;1976;unpublished)
Errol Magidson
Kennedy-King College, Chicago, Illinois
This lesson provides discussion and quizzes on various types of fallacies: hasty generalization, begging the question, faulty cause, false dilemma and faulty analogy.
none;none;college/university students

Finance, Personal

KEEPING A BALANCED CHECKBOOK (ckbk;1978;unpublished)
Errol Magidson
Kennedy-King College, Chicago, Illinois
This lesson shows the user the correct way to make entries in a checkbook and provides practice in adding deposits and subtracting checks.
none;none;general, adult education

First aid in illness and injury

FIRST AID SIMULATIONS (schindler;1979;unpublished)
Jay Schindler
Dept. of Health Education, U of I, Urbana

This lesson is designed to place the student in a simulated emergency. A description of the victim in need of first aid is provided and it is up to the student to choose the correct first aid actions to save the victim's life. There are three simulations.

none;none;students of first aid

Flight training

A AND P MECHANICS, AIRFRAME - WRITTEN EXAMINATION STUDY GUIDE (aflight;1978;unpublished)
Stanley R Trollip, William C Entwistle
Institute of Aviation, U of I, Urbana, Illinois

This lesson allows the student to practice taking the written examination for airframe A and P mechanics. The user may choose to take a quiz over one major category, a quiz over one or more subcategories, or a general quiz over all categories.

supplemental handout;open-ended;student flight instructors

FLIGHT ENGINEER - BASIC WRITTEN EXAMINATION STUDY GUIDE (feflight;1978;unpublished)
Stanley R Trollip, William C Entwistle
Institute of Aviation, U of I, Urbana, Illinois

This lesson allows the student to practice taking the written examination for flight engineer. The user may choose to take a quiz over one major category, a quiz over one or more subcategories, or a general quiz over all categories.

supplemental handout;open-ended;student flight instructors

Fluid mechanics

COMPRESSION AND EXPANSION OF FLUIDS AND POWER CYCLES (che52;1981;unpublished)
Robert S Tomaskovic, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana

This lesson treats the derivation of expressions for heat transferred and work done by a pure fluid during batch (non-flow) and flow process. Both isothermal and adiabatic conditions are investigated along with effects of staging. Also discussed are the internal combustion engine and steam power cycle. There are six practice problems.

none;none;chemical engineering students

FLOW MEASURING DEVICES (che35;1979;unpublished)
Michael Gilbert, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana
This lesson demonstrates the operation and utilization of various simple fluid flow measurement devices.
none;none;chemical engineering students

MECHANICAL ENERGY BALANCES PART I: ELEMENTARY (che34;1979;unpublished)
Michael Gilbert, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana
Second of two lessons on mechanical energy balances, this lesson deals with a variety of situations involving lost work due to friction, and methods for calculating such effects. Six practice problems are included.
none;none;students of chemical engineering

MECHANICAL ENERGY BALANCES PART II: ADVANCED (che24;1978;unpublished)
Michael Gilbert, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana
First of two lessons on mechanical energy balances, this lesson emphasizes situations where the flow is inviscid (Bernoulli's Equation), or where friction is known, as well as the interrelationship of potential energy, kinetic energy, pressure drop and work. Five practice problems are provided.
none;none;students of chemical engineering

Form perception

SHAPE RECOGNITION (dv122b;1978;unpublished)
Dirk Grunwald
Danville C. C. School District, Danville, Illinois
This lesson provides a game in which the child hears a word and touches the correct shape on the screen. Items that are missed are presented again.
votrax; touch panel;none;primary level students

WELCOME TO SHAPES (dv116b;1978;unpublished)
Dieter W Lawrence
Danville C. C. School District, Danville, Illinois
This lesson requires the preschool student to choose similar shapes from a choice of four.
touch panel;none;preschool level students

Fourier analysis

FOURIER: A PROGRAM ON FOURIER ANALYSIS AND SYNTHESIS (fourier;1974;unpublished)
Donald L Shirer
Valparaiso University, Indiana
This program provides a service lesson on Fourier analysis and synthesis using real variables. Fourier analysis and synthesis are explained, a dictionary of terms is available, and a brief history of the Fourier series is included.
none;open-ended;students of physics, mathematics and engineering

Fourier series

FOURIER: A PROGRAM ON FOURIER ANALYSIS AND SYNTHESIS (fourier;1974;unpublished)
Donald L Shirer
Valparaiso University, Indiana
This program provides a service lesson on Fourier analysis and synthesis using real variables. Fourier analysis and synthesis are explained, a dictionary of terms is available, and a brief history of the Fourier series is included.
none;open-ended;students of physics, mathematics and engineering

Fractions (Mathematics, Basic)

ALGEBRAIC FRACTIONS (algfracs;1981;unpublished)
Larry Dornhoff
Dept. of Mathematics, University of Illinois, Urbana
This lesson provides introductory examples and student drill in the algebraic manipulation of simple algebraic fractions: multiplication, subtraction, and simplification.
none;30-65 minutes;high school and college algebra students

MATH MAZE, A LESSON ON ADDING FRACTIONS (dv147b;1978;unpublished)
Stephen Gray
Danville C. C. School District, Danville, Illinois
This game requires that the student solve fraction problems in order to make his or her way across a maze.
touch panel;none;elementary level students

Fractions (Mathematics, Community College and Adult Educ.)

DECIMAL SKILLS V: COMPARING DECIMALS AND FRACTIONS (dec5;1980;unpublished)
Errol Magidson
Kennedy-King College, Chicago, Illinois
In this lesson the student will learn to change fractions to decimals, change mixed numbers to decimals, change decimals to fractions, and compare decimals and fractions in terms of their size.
none;none;students of basic mathematics, adult education

Fractions, Decimal

DECIMAL SKILLS I: READING AND WRITING DECIMALS
(dec1;1978;unpublished)
Errol Magidson
Kennedy-King College, Chicago, Illinois
This lesson explains the reading and writing of decimals. The student will learn how to read and write decimals using both the place method and the point method.
none;none;students of basic mathematics, adult education

DECIMAL SKILLS II: ADDING AND SUBTRACTING DECIMALS
(dec2;1978;unpublished)
Errol Magidson
Kennedy-King College, Chicago, Illinois
This lesson teaches the student to line up decimals for addition and subtraction, and to find the sum or difference as requested.
paper and pencil;none;students of basic mathematics, adult education

DECIMAL SKILLS IIA: ADDING DECIMALS (dec2a;1980;unpublished)
Errol Magidson
Kennedy-King College, Chicago, Illinois
This lesson teaches the student to line up decimals for addition and to find the sum of two or three integers.
paper and pencil;none;students of basic mathematics, adult education

DECIMAL SKILLS IIB: SUBTRACTING DECIMALS
(dec2b;1980;unpublished)
Errol Magidson
Kennedy-King College, Chicago, Illinois
This lesson teaches the student to line up decimals for subtraction and to find the difference.
paper and pencil;none;students of basic mathematics, adult education

DECIMAL SKILLS III: MULTIPLYING AND DIVIDING DECIMALS
(dec3;1978;unpublished)
Errol Magidson
Kennedy-King College, Chicago, Illinois
This lesson teaches the student to find the product of two decimals, insert the decimal point in the product of any two decimals, find the quotient of two numbers where there is a decimal in the dividend, and insert the decimal point in the quotient of two numbers where the divisor is a decimal.
paper and pencil;none;students of basic mathematics, adult education

DECIMAL SKILLS IIIA: MULTIPLYING DECIMALS
(dec3a;1980;unpublished)
Errol Magidson
Kennedy-King College, Chicago, Illinois
This lesson teaches the student to find the product of any two decimals and to insert the decimal point in the product of any two decimals.
paper and pencil;none;students of basic mathematics, adult education

DECIMAL SKILLS IIIB: DIVIDING DECIMALS
(dec3b;1980;unpublished)
Errol Magidson
Kennedy-King College, Chicago, Illinois
This lesson teaches the student to find the quotient of two numbers where there is a decimal in the dividend, and insert the decimal point in the quotient of two numbers where the divisor is a decimal.
paper and pencil;none;students of basic mathematics, adult education

DECIMAL SKILLS IV: ROUNDING DECIMALS (dec4;1978;unpublished)
Errol Magidson
Kennedy-King College, Chicago, Illinois
After completing this lesson the student will be able to round off decimals to the nearest tenth, hundredth, or thousandth.
none;none;students of basic mathematics, adult education

DECIMAL SKILLS V: COMPARING DECIMALS AND FRACTIONS
(dec5;1980;unpublished)
Errol Magidson
Kennedy-King College, Chicago, Illinois
In this lesson the student will learn to change fractions to decimals, change mixed numbers to decimals, change decimals to fractions, and compare decimals and fractions in terms of their size.
none;none;students of basic mathematics, adult education

KEEPING A BALANCED CHECKBOOK (ckbk;1978;unpublished)
Errol Magidson
Kennedy-King College, Chicago, Illinois
This lesson shows the user the correct way to make entries in a checkbook and provides practice in adding deposits and subtracting checks.
none;none;general, adult education

PERCENT SKILLS I: CONVERSIONS (per1;1978;unpublished)
Errol Magidson
Kennedy-King College, Chicago, Illinois
This lesson teaches the student to change any decimal to a percent and any percent to a decimal, and also to change any fraction or mixed number to a percent and back again.
paper and pencil;none;students of basic mathematics, adult education

PERCENT SKILLS II: BASIC WORD PROBLEMS (per2;1978;unpublished)
Errol Magidson
Kennedy-King College, Chicago, Illinois
This lesson teaches the student to identify the three basic numbers used in most word problems using percent, and to solve very basic word problems using percent.
paper and pencil;none;students of basic mathematics, adult education

PERCENT SKILLS IV: DIFFICULT WORD PROBLEMS (per4;1978;unpublished)
Errol Magidson
Kennedy-King College, Chicago, Illinois
This lesson presents the student with difficult word problems using percent.
paper and pencil;none;students of basic mathematics, adult education

PERCENT SKILLS: QUIZ (per3;1978;unpublished)
Errol Magidson
Kennedy-King College, Chicago, Illinois
This lesson provides a quiz covering the material presented in the "Percent Skills" lessons.
none;none;students of basic mathematics, adult education

France

Description, geography

FRENCH HISTORY (UNTIL THE END OF THE SECOND WORLD WAR) (frcult1;1982;unpublished)
Fernand Marty, Sandra Moreno
Comp.-based Educ. Res. Lab., U of I, Urbana
This lesson is first in a series of 42 lessons designed to help the student understand contemporary France. Lesson one discusses the geographical aspects of France.
none;10-15 minutes per lesson;persons interested in French history

France--History

FRENCH HISTORY (UNTIL THE END OF THE SECOND WORLD WAR)
(frcult1;1982;unpublished)
Fernand Marty, Sandra Moreno
Comp.-based Educ. Res. Lab., U of I, Urbana

This lesson is first in a series of 42 lessons designed to help the student understand contemporary France. Lesson one discusses the geographical aspects of France.

none;10-15 minutes per lesson;persons interested in French history

French language in Africa

ELEMENTS FOR SELF-EXPRESSION IN FRENCH: THE FRENCH LANGUAGE IN THE WORLD (frmonde;1981;unpublished)
Fernand Marty, Sandra Moreno
French Department, University of Illinois

This lesson attempts to provide the user with some important historic information about the French language which should enable better understanding of the importance of French in this last quarter of the twentieth century. Part one treats the language as it developed in France; part two discusses the French language in Europe, America, Africa and Asia.

none;45 minutes;persons interested in the French language

French language in Asia

ELEMENTS FOR SELF-EXPRESSION IN FRENCH: THE FRENCH LANGUAGE IN THE WORLD (frmonde;1981;unpublished)
Fernand Marty, Sandra Moreno
French Department, University of Illinois

This lesson attempts to provide the user with some important historic information about the French language which should enable better understanding of the importance of French in this last quarter of the twentieth century. Part one treats the language as it developed in France; part two discusses the French language in Europe, America, Africa and Asia.

none;45 minutes;persons interested in the French language

French language in Canada

ELEMENTS FOR SELF-EXPRESSION IN FRENCH: THE FRENCH LANGUAGE IN THE WORLD (frmonde;1981;unpublished)
Fernand Marty, Sandra Moreno
French Department, University of Illinois

This lesson attempts to provide the user with some important historic information about the French language which should enable better understanding of the importance of French in this last quarter of the twentieth century. Part one treats the language as it developed in France; part two discusses the French language in Europe, America, Africa and Asia.

none;45 minutes;persons interested in the French language

French language in the United States

ELEMENTS FOR SELF-EXPRESSION IN FRENCH: THE FRENCH LANGUAGE IN THE WORLD (frmonde;1981;unpublished)
Fernand Marty, Sandra Moreno
French Department, University of Illinois

This lesson attempts to provide the user with some important historic information about the French language which should enable better understanding of the importance of French in this last quarter of the twentieth century. Part one treats the language as it developed in France; part two discusses the French language in Europe, America, Africa and Asia.

none;45 minutes;persons interested in the French language

French language--Phonetics

FRENCH PHONEMIC TRANSCRIBER (frsyf;1979;unpublished)
Robert Hart, Fernand Marty
French Department, University of Illinois

This lesson will provide the student with the phonemic transcription of single French words.

optional votrax;open-ended;students of French

Fuel pumps

MULTIPLE PUMP FUEL SYSTEM (chamfps;1981;unpublished)
Al Shaw
Chanute Air Force Base, Illinois

This lesson illustrates and describes the functions of the automotive multiple pump fuel system which is used in many diesel engines.

none;none;persons interested in automobile mechanics

Fuel--Tables, calculations, etc.

ENERGY USAGE (energy1;1976;unpublished)
David Churches, Silas Warner, Toufiq Siddiqi
Indiana University, Public & Environmental Affairs

This lesson is designed to illustrate the different relationships among energy forms, as well as present and historic patterns of energy consumption.

none;30 minutes;persons interested in energy consumption

WORLD ENERGY DIRECTORY (energy3;1976,82;unpublished)
David Churches, Silas Warner, Toufiq Siddiqi
Indiana University, Public and Environmental Affairs

This lesson gives oil and natural gas production and reserves for the 72 major oil-producing nations of the world with the most current figures available (as of December 1980).

none;30 minutes;general

WORLD ENERGY LIFESTYLE INDEX (energy4;1976;unpublished)
Toufiq Siddiqi, Silas Warner, David Churches,
Albert J Frisch, Barry Castleman
Indiana University, Public and Environmental Affairs
With this lesson the user can determine how much energy he or she uses each year, and where it goes. The short form may be selected, in which case, information from the user's utility bills is entered. Or, the long form, which is more accurate, may be used to compile an energy index from responses to questions about appliances owned, means of travel, etc.
none;20 minutes;general

Functions

COMPOSITE AND INVERSE FUNCTIONS (funcs;1981;unpublished)
Larry Dornhoff
Dept. of Mathematics, University of Illinois, Urbana
This lesson provides definitions, examples, and exercises on constant, identity, composite, and inverse functions. The student also learns how to tell if an inverse function exists, and how to find it.
none;17-35 minutes;high school and college algebra students

EXPONENTIAL FUNCTIONS (expfuncs;1980;unpublished)
Larry Dornhoff
Dept. of Mathematics, University of Illinois, Urbana
This lesson presents graphing and algebraic solution of equations with the unknown in the exponent. Exercises involving population growth, radioactive decay, and compound interest are also presented.
none;27-55 minutes;high school and college algebra students

FUNCTIONS AND THEIR GRAPHS (funcgraf;1981;unpublished)
Larry Dornhoff
Dept. of Mathematics, University of Illinois, Urbana
This lesson provides definitions, examples, algebraic notation, and graphs of functions. Exercises in the evaluation of functions, including composite functions, are included.
none;25-50 minutes;high school and college algebra students

Functions, Exponential

EXPONENTIAL FUNCTIONS (expfuncs;1980;unpublished)
Larry Dornhoff
Dept. of Mathematics, University of Illinois, Urbana
This lesson presents graphing and algebraic solution of equations with the unknown in the exponent. Exercises involving population growth, radioactive decay, and compound interest are also presented.
none;27-55 minutes;high school and college algebra students

Functions, Inverse

COMPOSITE AND INVERSE FUNCTIONS (funcs;1981;unpublished)
Larry Dornhoff
Dept. of Mathematics, University of Illinois, Urbana
This lesson provides definitions, examples, and exercises on constant, identity, composite, and inverse functions. The student also learns how to tell if an inverse function exists, and how to find it.
none;17-35 minutes;high school and college algebra students

Fungi, Pathogenic

MEDICAL MYCOLOGY: SYSTEMIC MYCOSES (fungus;1980;unpublished)
Eunice Schuytema, Marcia Johnson
Rush University, Chicago, Illinois
This tutorial lesson covers the general properties of systemic mycoses, including pathogenesis, epidemiology, and clinical cases. A quiz is included.
none;45 minutes;medical students and students of microbiology and mycology

OPPORTUNISTIC FUNGI: CUTANEOUS AND SUBCUTANEOUS MYCOSES (afungus;1981;unpublished)
Eunice Schuytema, Christine Cherry
Rush University, Chicago, Illinois
This tutorial lesson in medical mycology discusses opportunistic fungi, cutaneous fungi and subcutaneous fungi. Morphology, epidemiology, pathogenesis, clinical syndromes, diagnosis and therapy are presented.
none;40 minutes;first year medical students and students of microbiology and mycology

Future interests

FUTURE INTERESTS (morgan;1976;unpublished)
Thomas D Morgan
College of Law, University of Illinois, Urbana, Ill.
This law lesson is designed for students having varying degrees of experience working with future interests. Problems are presented in which the student is asked to identify the various interests illustrated.
none;none;students of law

Gases

--in chemistry

EVALUATION OF FUGACITY COEFFICIENTS - MIXTURES
(che50;1979;unpublished)
Robert S Tomaskovic, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana

This lesson describes various methods for evaluation of fugacity coefficients of gas phase mixtures, and introduces solubility of liquids and solids in a dense gas. There are four practice problems.

none;none;chemical engineering students

EVALUATION OF FUGACITY COEFFICIENTS - PURE MATERIALS
(che42;1979;unpublished)
Robert S Tomaskovic, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana

This lesson describes various methods for evaluation of fugacity coefficients of pure gases, liquids, and solids, and is designed for undergraduate thermodynamics students. There are five practice problems.

none;none;chemical engineering students

REFRIGERATION CYCLES AND LIQUEFACTION PROCESSES
(che51;1980;unpublished)
Robert S Tomaskovic, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana

This lesson involves the use of various types of diagrams to evaluate important quantities for some typical refrigeration cycles. Two processes for the liquifaction of gases are also studied.

none;none;chemical engineering students

Geese

MISSISSIPPI VALLEY CANADIAN GOOSE POPULATION
(duck;1981;unpublished)
Dennis G[illegible]ner
Souther[illegible]llinois University, Carbondale, Illinois

This is a simulation game on waterfowl management, presenting some of the problems and decisions of a waterfowl manager.

none;none;persons interested in waterfowl management

Geology--Nomenclature

NAME THAT MINERAL (namemin;1980;unpublished)
Dennis Gruner
Southern Illinois University, Carbondale, Illinois
This is a game that measures the student's ability to determine the name of an unknown mineral based on physical properties that are presented.
none;none;students of mineralogy and geology

Geometry--Problems, exercises, etc.

PROBLEMS IN GEOMETRY (dv146a;1978;unpublished)
Damon Scaggs
Danville C. C. School District, Danville, Illinois
This elementary lesson presents geometry problems that ask the student to identify numbers in the intersection of circles, triangles, rectangles, and squares.
none;none;elementary level students

Geometry, Analytic

THE CYLINDRICAL COORDINATE SYSTEM (cyl;1975;unpublished)
David V Meller
Comp.-based Educ. Res. Lab., University of Illinois
This lesson defines terms related to the cylindrical coordinate system and provides space in which the student can practice plotting constant value surfaces in the system.
none;30 minutes;students of electrical engineering

THE RECTANGULAR COORDINATE SYSTEM (rect;1975;unpublished)
David V Meller
Comp.-based Educ. Res. Lab., University of Illinois
This lesson defines terms related to the rectangular coordinate system and provides space in which the student can practice plotting constant value surfaces in the system.
none;35 minutes;students of electrical engineering

THE SPHERICAL COORDINATE SYSTEM (sph;1975;unpublished)
David V Meller
Comp.-based Educ. Res. Lab., University of Illinois
This lesson defines terms related to the spherical coordinate system and provides space in which the student can practice plotting constant value surfaces in the system.
none;45 minutes;students of electrical engineering

Graphic methods

THE CYLINDRICAL COORDINATE SYSTEM (cyl;1975;unpublished)
David V Meller
Comp.-based Educ. Res. Lab., University of Illinois
This lesson defines terms related to the cylindrical coordinate system and provides space in which the student can practice plotting constant value surfaces in the system.
none;30 minutes;students of electrical engineering

THE RECTANGULAR COORDINATE SYSTEM (rect;1975;unpublished)
David V Meller
Comp.-based Educ. Res. Lab., University of Illinois
This lesson defines terms related to the rectangular coordinate system and provides space in which the student can practice plotting constant value surfaces in the system.
none;35 minutes;students of electrical engineering

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David V Meller
Comp.-based Educ. Res. Lab., University of Illinois
This lesson defines terms related to the spherical coordinate system and provides space in which the student can practice plotting constant value surfaces in the system.
none;45 minutes;students of electrical engineering

Gynecologic nursing

A SIMULATED PATIENT CASE REGARDING THE INTRAUTERINE DEVICE (blackwell;1977,81;unpublished)
Jane Blackwell, Richard S Trynda
College of Nursing, U of I Med. Center, Chicago, Il.
The purpose of this simulation is to act as a refresher lesson for certified nurse-midwives regarding the use of an intrauterine device.
none;none;nurse-midwives, nursing students

Heart

CARDIOVASCULAR PHYSIOLOGY PART I: PRESSURE/FLOW RELATIONS (circsys;1981;unpublished)
Allen Rovick, Jerry Justic
Rush University, Chicago, Illinois
This lesson tests the student's understanding of blood flow relationships including pump capacity of the heart, tensile strength of blood vessels, and porosity of capillaries.
none;none;first year medical students and students of physiology

ss90

HEARTBREAK: A SIMULATION OF THE HEART AND PERIPHERAL CIRCULATION (heartsim;1980;unpublished)
C Dickenson, K Ahmed, C Goldsmith, D Sackett,
Allen Rovick, Lisa Brenner, Chisoo Choi
Rush University, Chicago, Illinois

This lesson provides a simulation of the heart and peripheral circulation, accounting for the heart inside the chest, systemic arteries and arterioles, and capillary bed and veins collecting blood from the capillary bed and returning it to the heart. The model can simulate most types of generalized heart disease, with the exception of valve lesions.

none;open-ended;first year medical students and students of physiology

Heart conduction system

HEARTBREAK: A SIMULATION OF THE HEART AND PERIPHERAL CIRCULATION (heartsim;1980;unpublished)
C Dickenson, K Ahmed, C Goldsmith, D Sackett,
Allen Rovick, Lisa Brenner, Chisoo Choi
Rush University, Chicago, Illinois

This lesson provides a simulation of the heart and peripheral circulation, accounting for the heart inside the chest, systemic arteries and arterioles, and capillary bed and veins collecting blood from the capillary bed and returning it to the heart. The model can simulate most types of generalized heart disease, with the exception of valve lesions.

none;open-ended;first year medical students and students of physiology

Heart--Muscle

BAROCEPTOR REVIEW (heartsm2;1981;unpublished)
Allen Rovick, R Zitnik, A Banda
Rush University, Chicago, Illinois

This cardiovascular physiology lesson provides elementary treatment of the baroceptor control system and explores the role of the effector responses in regulation of blood pressure by having the student complete a control diagram under guidance.

none;none;first year medical students and students of physiology

CARDIOVASCULAR PHYSIOLOGY PART II: REFLEX (reflex;1981;unpublished)
Allen Rovick, R Zitnik
Rush University, Chicago, Illinois

This lesson deals primarily with the baroceptor reflex. Pressure, flow, resistance relationships, postural effects, general efferent components and specific regional effects are covered.

none;none;first year medical students and students of physiology

Heat exchangers

INTRODUCTION TO HEAT EXCHANGERS (che19;1978;unpublished)
Michael Gilbert, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana

This lesson describes elemental heat exchanger design and the difference between cocurrent and countercurrent operation. The use of the log mean temperature is also demonstrated. Problems for practice are included.

none;none;chemical engineering students

Heat-engines

CARNOT HEAT ENGINES (che28;1979;unpublished)
Robert S Tomaskovic, Timothy T Oberle
Dept. of Chemical Engineering, U of I, Urbana

This is a lesson on Carnot cycle analysis designed for a junior level thermodynamics course in chemical engineering.

none;none;chemical engineering students

Hematology

COAGULATION SYSTEMS (coagsys;1980;unpublished)
Nancy A Lee, Lisa Brenner
Rush College, Chicago, Illinois

This hematology lesson presents coagulation factors and groups these factors according to site of synthesis, common characteristics and mode of action. It describes the two major pathways of coagulation and controls that prevent excess clotting. Lab tests for evaluating coagulation and explaining abnormal data are also discussed.

none;1 hour;students of medical technology and hematology

RED BLOOD CELL INDICES (rbci;1980;unpublished)
Nancy A Lee, Scott Rubenstein
Rush University, Chicago, Illinois

This hematology lesson presents information about the red blood cell indices and how they relate to cellular morphology. Calculation of the indices is also discussed. There is a quiz at the end in which the student must calculate the indices from given values and then answer questions on cell morphology based on the calculated values of the indices.

none;45 minutes;students of medical technology and hematology

Hematology--Examinations, questions, etc.

RED BLOOD CELL INDICES (rbci;1980;unpublished)
Nancy A Lee, Scott Rubenstein
Rush University, Chicago, Illinois

This hematology lesson presents information about the red blood cell indices and how they relate to cellular morphology. Calculation of the indices is also discussed. There is a quiz at the end in which the student must calculate the indices from given values and then answer questions on cell morphology based on the calculated values of the indices.

none;45 minutes;students of medical technology and hematology

Hemoglobin

RED BLOOD CELL INDICES (rbci;1980;unpublished)
Nancy A Lee, Scott Rubenstein
Rush University, Chicago, Illinois

This hematology lesson presents information about the red blood cell indices and how they relate to cellular morphology. Calculation of the indices is also discussed. There is a quiz at the end in which the student must calculate the indices from given values and then answer questions on cell morphology based on the calculated values of the indices.

none;45 minutes;students of medical technology and hematology

Histology

HISTOLOGY: CYTOLOGY QUIZ (cytology;1980;unpublished)
Eric W Jacobson, James A Colgan, W Franklin Hughes
Rush University, Chicago, Illinois

This lesson provides a twenty question cytology quiz with feedback for correct and incorrect answers.

none;20 minutes;first year medical students and students of histology

HISTOLOGY: ELECTRON MICROGRAPHS (histoem;1981;unpublished)
James A Colgan, M K Haag
Rush University, Chicago, Illinois

This lesson covers subcellular organelles via microfiche projection of electron micrographs. The lesson is divided into three parts: visual identification of the organelles, functions of the organelles, and identification of the organs of tissues most often associated with the organelles.

microfiche;none;first year medical students and students of histology

Histology--Examinations, questions, etc.

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Eric W Jacobson, James A Colgan, W Franklin Hughes
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microfiche;none;first year medical students and students of histology

Homonyms

HOMONYM DRILLS (dv121a;1978;unpublished)
Don Gillies
Danville C. C. School District, Danville, Illinois

This lesson defines homonyms as words that sound alike but are spelled differently. Drills are provided for student practice.

touch panel;none;elementary level students

Human embryology

AMNIOTIC FLUID (mnurse9;1975;unpublished)
Maryann Bitzer, Martha Boudreaux
Mercy Hospital School of Nursing, Urbana, Ill.

Upon completion of this lesson the student will be able to list the characteristics and describe the functions of amniotic fluid, and recognize some of its uses in prenatal diagnosis.

none;none;nursing students

FETAL CIRCULATION (mnurse6;1975;unpublished)
Maryann Bitzer, Martha Boudreaux, Donald Bitzer
Mercy Hospital School of Nursing, Urbana, Ill.

After completing this lesson the student should be able to describe the development of placental circulation, explain the differences between the fetal and mature circulatory systems, and trace the flow of blood through the fetal circulatory system.

microfiche;none;nursing students

Human mechanics

A QUALITATIVE ANALYSIS OF THE FOREHAND STROKE IN TENNIS (tenfm1;1981;unpublished)
Larry Good, Diann Gordon
Southern Illinois University, Carbondale, Illinois

This two unit lesson teaches the student to analyze human motion and understand the underlying principles, and to apply the mechanical principles of force and motion to an analysis of the forehand stroke in tennis.

none;none;students of physical education; persons interested in tennis

Hypnotics

HYPNOTICS AND SEDATIVES (phc20;1974,81;unpublished)
R J Reiffenstein, Darin Brox
University of Alberta, Canada / University of Kansas
This lesson provides a review of sedatives and hypnotics and a ten question quiz over the material. The student may choose to do either.
touch panel;15 minutes;students of pharmacology

Idealism

COMPARATIVE PHILOSOPHY (phil1;1980;unpublished)
Jerry W Joplin, Emil R Spees
Southern Illinois University, Carbondale, Illinois
This is an introductory course in philosophy for students who are interested in learning the relevancy of philosophy to their given subject matter.
none;none;persons interested in comparative philosophy

Indexes

ELECTRICAL ENGINEERING INDEX (uieeindex;1975;unpublished)
David V Meller
Comp.-based Ed. Res. Lab., University of Illinois
This program provides an index to electrical engineering lessons.
none;none;students of electrical engineering

LEGAL INDEX (legal;1976;unpublished)
Peter B Maggs
College of Law, University of Illinois, Urbana
This lesson provides an index by subject area of law lessons and quizzes. Related lessons that might interest the law student are included.
none;open-ended;law students

RHETORIC LESSON INDEX (rhetind;1980;unpublished)
Richard C Burke
Department of English, University of Illinois, Urbana
This file contains an index to PLATO lessons on composition.
none;none;composition students

Individualized instruction

IGE SCHOOLS (dv112b;1978;unpublished)
Stephen Gray
Danville C. C. School District, Danville, Illinois
This lesson is intended for teachers and presents a discussion of individually guided education.
none;none;general; teachers

Information storage and retrieval systems--Medicine

INTRODUCTION TO INDEX MEDICUS AND MESH (mesh;1980;unpublished)
Philip Musser, Jim Webb
Library of the Health Sciences, U of I, Urbana, Ill.

This lesson acquaints the health professional with the organization and content of Index Medicus and MeSH, and describes the relationships between the two different references. Examples demonstrating some effective uses of the resources are provided.

none;none;health professionals

Intrauterine contraceptives

A SIMULATED PATIENT CASE REGARDING THE INTRAUTERINE DEVICE (blackwell;1977,81;unpublished)
Jane Blackwell, Richard S Trynda
College of Nursing, U of I Med. Center, Chicago, Il.

The purpose of this simulation is to act as a refresher lesson for certified nurse-midwives regarding the use of an intrauterine device.

none;none;nurse-midwives, nursing students

Japanese Language--Study and teaching

COMMON KANJI COMPOUNDS (yoogo;1982;unpublished)
J Marshall Unger
E. Asian Languages, University of Hawaii, Manoa

The object of the lesson is to familiarize the student with 1000 Japanese vocabulary items which might be encountered in newspapers, magazines, etc. Each word is written with a pair of Chinese characters or "kanji". The student studies each word and its meaning first, then how it is written. The lesson is textbook-independent.

none;open-ended;first year students of Japanese

Jurisdiction

FEDERAL RULE 12 (rule12;1979;unpublished)
Prudence C Abram, Layman E Allen, Arthur R Miller,
John Johnson, Peter B Maggs
University of Michigan / University of Illinois

This law lesson provides an exercise on Federal Rule 12 and related rules. It is designed to aid the student's understanding of the operation of Federal motion practices by way of a simulated case.

none;none;students of law

Juvenile delinquency

COMMUNITY DEVELOPMENT AUTHOR/INSTRUCTOR INFORMATION LESSON (cdcons5;1980;1982)
Terry Alliband, Dane Winberg
Southern Illinois University, Carbondale
This lesson contains an explanation of the scoring and help sequences of the associated community development lessons (cdcons, cdcons2, cdcons3, cdcons4). Also included is a short bibliography of community development literature.
none;10-15 minutes;instructors interested in using the associated community development lessons

Kinship--Terminology

FAMILY RELATIONSHIPS (dv165a;1979;unpublished)
Joan Jamieson, Don Gillies
Danville C. C. School District, Danville, Illinois
This primary lesson presents the words used to refer to various family members and explains their relationship to one another.
touch panel;none;primary level students

Krebs cycle

RESPIRATORY CHAIN (nevilla;1981;unpublished)
William A Nevill, Ilias Sotos
Indiana University / Purdue University
This lesson discusses the chemical steps which comprise the respiratory chain, and illustrates the chemical reactions of the coenzymes and production of ATP.
none;20 minutes;students of the health sciences

Labor (Obstetrics)

ANALGESIA/ANESTHESIA APPLICATIONS IN NURSE-MIDWIFERY PRACTICE (nmwanes;1977,81;1982)
Sarah J Naber, Richard S Trynda
College of Nursing, U of I Med. Center, Chicago, Il.
This lesson teaches the student to recognize indications for analgesia and anesthesia in the intrapartum period and to manage the cases presented successfully. Each case has several points for student judgement and management.
none;none;nursing students

GRAPHIC ANALYSIS OF LABOR (nmwglabor;1977,81;1982)
Sarah J Naber, Paul Resch
College of Nursing, U of I Med. Center, Chicago, Il.
This lesson teaches the student to recognize the graphic representations of cervical dilation and fetal descent in ideal primigravid and multiparous labors, state statistical limits of normal primigravid and multiparous labor progressions, and use the cervical-dilation-time and fetal-descent-time relationships for assessing labor progress.
none;none;nursing students

Language and languages
LANGUAGE PLANNING (langplan;1980;unpublished)
Glenn Gilbert, Roger Bertelsen, Dane Winberg
Southern Illinois University, Carbondale, Illinois
This three part lesson begins with a discussion of language planning and the role of the language planner. A simulation in which the user plays the role of the language planner, choosing and implementing a language for a newly independent country, is also included.
none;30 minutes for each lesson;students of sociolinguistics

Latin language--Law Latin
LEGAL LATIN (lvoc2;1976;unpublished)
Peter B Maggs
College of Law, University of Illinois, Urbana, Il.
This exercise is designed to help the student develop an active vocabulary of legal Latin words and phrases.
none;none;law students

Law examinations
CALIFORNIA PROFESSIONAL RESPONSIBILITY EXAMINATION FEBRUARY 1975 (ethics2;1976;unpublished)
Peter B Maggs, Bruce Maggs, Gregory Maggs
College of Law, University of Illinois, Urbana, Ill.
This lesson contains practice questions on legal ethics from the California Bar Examination.
none;none;law students

Law--Abbreviations
LEGAL ABBREVIATIONS (lvoc1;1976;unpublished)
Peter B Maggs
College of Law, University of Illinois, Urbana, Il.
This law lesson provides exercises in translating regular English words into legal abbreviations and vice versa.
none;none;law students

Law--History and criticism

ENGLISH POOR LAW HISTORY (herb;1981;unpublished)
Marilyn Flynn, Robert Arnold, Tom Layman,
Dave Racine
School of Social Work, University of Illinois, Urbana
This lesson presents a brief history and discussion of the English Poor Law.
none;none;university/college students, law students

Law--Interpretation and construction

APPLYING RULES (factfind;1976;unpublished)
Charles D Kelso
College of Law, Indiana University
In this law lesson the student is asked to determine whether a decision maker applied a rule literally and without need for resolution of ambiguities, or whether other modes of reasoning were used.
none;none;law students

ARRESTS (arrests;1977;unpublished)
Joe Harbaugh, Ira Goldman, Jane Kelso, J Clark Kelso
Temple U. School of Law/College of Law, Indiana U.
In this timed simulation the student assumes the role of Assistant District Attorney and must decide, after reviewing the provided information, whether or not to arrest a prime suspect in a larceny case.
none;none;law students

BRIEFING CASES (etslaw;1977;unpublished)
Charles D Kelso, John Johnson, J Clark Kelso
College of Law, Indiana University
In this law exercise the student is asked to read the court's opinion in Hawkins v. McGee and then edit sentences proposed for a brief.
none;none;law students

CASES ON CHEATING (cheating;1977;unpublished)
Charles D Kelso, J Clark Kelso
College of Law, Indiana University
These law exercises are designed to teach and test skill in analyzing issues and reasoning, both logically and judgmentally, when interpreting and applying a set of rules. The student must identify each major issue in each case and evaluate the strength of arguments which might be used in dealing with the issues.
none;none;law students

ss99

CONDITIONS FOR PATENTABILITY, NON-OBVIOUS SUBJECT MATTER (patents;1973,74;unpublished)
Robert M Hammes, Peter B Maggs
College of Law, University of Illinois, Urbana, Ill.

This lesson deals with five Supreme Court patentability cases. An hypothetical fact situation follows which is accompanied by a series of questions. The student is to answer the questions, referring to the cases presented for legal basis.

none;none;students of law

CORPORATE DIVIDENDS (dividend;1976;unpublished)
Harry G Henn, Robert C Platt
Cornell University Law School, Ithaca, New York

This lesson in corporate law presents general procedures for solving maximum legal dividend problems.

none;60 minutes;students of law

COUNSELING PROGRAMS (counsel;1980;unpublished)
Jean Cahn, Edgar Cahn, Jane Kelso, Charles D Kelso,
J Clark Kelso
College of Law, Indiana University

This lesson provides exercises which treat the different phases of the lawyer/client relationship and teach important lawyering skills.

none;none;law students

ECONOMICS OF TORT LIABILITY (eclaw;1981;unpublished)
John Prather Brown, Thomas Wheeler,
Michael R Huybensz, Robert C Platt
Cornell University Law School, Ithaca, New York

This lesson uses the example (taken from hundreds of cases of the late 19th century) of the interaction of a farmer and a train to analyse the effect of various rules of tort.

none;none;students of law

FEDERAL RULE 12 (rule12;1979;unpublished)
Prudence C Abram, Layman E Allen, Arthur R Miller,
John Johnson, Peter B Maggs
University of Michigan / University of Illinois

This law lesson provides an exercise on Federal Rule 12 and related rules. It is designed to aid the student's understanding of the operation of Federal motion practices by way of a simulated case.

none;none;students of law

FINDING FACTS (factfind;1976;unpublished)
Charles D Kelso
College of Law, Indiana University
In this law lesson the student is asked to determine how a decision maker dealt with evidence in reaching a decision which purported to apply a stated rule to facts found from the evidence.
none;none;law students

FUTURE INTERESTS (morgan;1976;unpublished)
Thomas D Morgan
College of Law, University of Illinois, Urbana, Ill.
This law lesson is designed for students having varying degrees of experience working with future interests. Problems are presented in which the student is asked to identify the various interests illustrated.
none;none;students of law

LEGAL INDEX (legal;1976;unpublished)
Peter B Maggs
College of Law, University of Illinois, Urbana
This lesson provides an index by subject area of law lessons and quizzes. Related lessons that might interest the law student are included.
none;open-ended;law students

LEGAL RELATIONS (hohfeld;1979;unpublished)
Charles D Kelso, J Clark Kelso
College of Law, Indiana University
This lesson provides exercises on identifying powers and duties in legal relationships according to Hohfeld's concepts.
none;none;students of law

LOGICAL CONNECTION (cope;1976;unpublished)
Charles D Kelso
College of Law, Indiana University
This lesson presents judicial opinions and sentences which summarize the judges' reasoning. The student is then asked to complete related sentences by selecting the most accurate word or phrase from a list supplied by the program.
none;none;law students

NEGLIGENCE: IDENTIFYING ASSUMPTIONS (carll;1979;unpublished)
Robert C Platt
Antioch Law School, Washington, D. C.
This law lesson defines terms related to negligence and presents two cases to illustrate the concepts.
none;none;law students

OFFER AND ACCEPTANCE (offer;1978;unpublished)
Peter B Maggs
College of Law, University of Illinois, Urbana, Ill.
This law lesson presents problems of communication associated with offer and acceptance. The early problems in the lesson introduce a few simple rules and apply them to simple fact situations. As the material is mastered the student may proceed at his or her own pace.
none;none;students of law

QUIETING TITLE TO BLACKACRE (counsprop;1977;unpublished)
Jane Kelso, J Clark Kelso
College of Law, Indiana University
This law lesson simulates an initial interview with prospective clients regarding possible defenses to quiet a title action.
none;30 minutes;students of law

Letter-writing

THE BUSINESS LETTER (buslet;1981;unpublished)
Paula Larsen
Southern Illinois University, Carbondale, Illinois
This lesson presents the essential parts of a business letter and where to place them on a page. A quiz is included at the end of the lesson.
touch panel;15-20 minutes;general

Liability (Law)

ECONOMICS OF TORT LIABILITY (eclaw;1981;unpublished)
John Prather Brown, Thomas Wheeler,
Michael R Huybensz, Robert C Platt
Cornell University Law School, Ithaca, New York
This lesson uses the example (taken from hundreds of cases of the late 19th century) of the interaction of a farmer and a train to analyse the effect of various rules of tort.
none;none;students of law

Linear programming

INTRODUCTION TO LINEAR PROGRAMMING (or9;1977;unpublished)
Lee Schruben, Paul S Zarnowski, Robert Breitman
Cornell University, Ithaca, New York
This is a four lesson series on linear programming. Areas treated are: introduction to linear relationships, the formulation of a linear program, and graphical and numerical solutions to linear programs.
fourth lesson needs touch panel;2-3 hours for series;undergraduate or graduate level

Logic

LOGIC: FALLACIES (fall;1976;unpublished)
Errol Magidson
Kennedy-King College, Chicago, Illinois
This lesson provides discussion and quizzes on various types of fallacies: hasty generalization, begging the question, faulty cause, false dilemma and faulty analogy.
none;none;college/university students

LOGIC: PROPAGANDA METHODS (prop;1976;unpublished)
Errol Magidson
Kennedy-King College, Chicago, Illinois
This lesson discusses the logical versus the illogical argument. Subjects treated are: appeal to prejudice, prestige, popular view, force, and pity.
none;none;college/university students

Mail preparation

THE MAILROOM (mailroom;1981;unpublished)
Melanie C Geyer, David R Abernathy
Bell System Center, Technical Educ., Lisle, Ill.
This processor program allows a user to format text or labels for printing by: storing a list of names and associated information, allowing entry and storage of text items (such as the body of a letter) as well as formatting the text items for any specified individuals. Access to a nameset is required.
none;open-ended;general

Manometer

FLOW MEASURING DEVICES (che35;1979;unpublished)
Michael Gilbert, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana
This lesson demonstrates the operation and utilization of various simple fluid flow measurement devices.
none;none;chemical engineering students

Maps

A LESSON ON MAPPING (dv130a;1978;unpublished)
Stephen Gray
Danville C. C. School District, Danville, Illinois
This lesson teaches the student basic mapping skills. Areas treated are the compass, scales, map distances and map reading.
touch panel;none;elementary level students

Mass spectrometry

INTRODUCTION TO MASS SPECTROSCOPY (maspec;1978;unpublished)
Jean Thrasher
Chemistry Department, Indiana University
This lesson provides an introduction to the mass spectrometer and to the interpretation of its graphs for identification of various organic compounds.
none;40 minutes;students of analytical or organic chemistry

Maternal-fetal exchange

AMNIOTIC FLUID (mnurse9;1975;unpublished)
Maryann Bitzer, Martha Boudreaux
Mercy Hospital School of Nursing, Urbana, Ill.
Upon completion of this lesson the student will be able to list the characteristics and describe the functions of amniotic fluid, and recognize some of its uses in prenatal diagnosis.
none;none;nursing students

FETAL CIRCULATION (mnurse6;1975;unpublished)
Maryann Bitzer, Martha Boudreaux, Donald Bitzer
Mercy Hospital School of Nursing, Urbana, Ill.
After completing this lesson the student should be able to describe the development of placental circulation, explain the differences between the fetal and mature circulatory systems, and trace the flow of blood through the fetal circulatory system.
microfiche;none;nursing students

Mathematics

Graphic methods

THE CYLINDRICAL COORDINATE SYSTEM (cyl;1975;unpublished)
David V Meller
Comp.-based Educ. Res. Lab., University of Illinois
This lesson defines terms related to the cylindrical coordinate system and provides space in which the student can practice plotting constant value surfaces in the system.
none;30 minutes;students of electrical engineering

THE RECTANGULAR COORDINATE SYSTEM (rect;1975;unpublished)
David V Meller
Comp.-based Educ. Res. Lab., University of Illinois
This lesson defines terms related to the rectangular coordinate system and provides space in which the student can practice plotting constant value surfaces in the system.
none;35 minutes;students of electrical engineering

THE SPHERICAL COORDINATE SYSTEM (sph;1975;unpublished)
David V Meller
Comp.-based Educ. Res. Lab., University of Illinois
This lesson defines terms related to the spherical coordinate system and provides space in which the student can practice plotting constant value surfaces in the system.
none;45 minutes;students of electrical engineering

Matrices

MATRICES (matrices;1981;unpublished)
Larry Dornhoff
Dept. of Mathematics, University of Illinois, Urbana
This lesson defines a matrix, its size and its entries. It treats the computation of determinants, with exercises for 2x2, 3x2, and 4x4 determinants. Exercises involving the use of Cramer's Rule to solve 2x2 or 3x3 systems of simultaneous linear equations are also included.
none;32-65 minutes;high school and college algebra students

MATRIX ROUTINES (matrix;1973;unpublished)
Carol D Bennett
Physics Department, University of Illinois
This program provides matrix routines for eigenvalues and eigenvectors of symmetric matrices and for solutions to simultaneous linear algebraic equations.
none;open-ended;students of classical mechanics, elementary physics

Medicaid

MEDICAID, TITLE XIX OF THE SOCIAL SECURITY ACT (medicaid;1981;unpublished)
Evelyn Kahn, Linda Edwards, Larry Kemp
College of Nursing, U of I Med. Center, Chicago, Il.
Upon completion of this lesson the student should be able to analyze the impact of Medicaid on the availability and comprehensiveness of health care, apply provisions of Medicaid to clients in the community, demonstrate understanding of benefits under Public Aid, and acquire the skills necessary to utilize available health resources as a family advocate.
none;none;nursing students

Medical ethics

FAILURE TO DIAGNOSE BATTERED-CHILD SYNDROME
(batter;1978;unpublished)
Allan H Levy
School of Basic Medical Sciences, Univ. of Illinois

This lesson contains the text of an article from the "New England Journal of Medicine". Its purpose is to provide a focus for the discussion of problems in one area of medical ethics. The article, written by William J. Curran, presents a summary of a precedent-setting case involving the responsibilities of physicians in battered-child cases.

none;none;medical students, law students

IMPORTANT ISSUES IN MEDICINE - ORDERS NOT TO RESUSCITATE
(rescu;1979;unpublished)
Allan H Levy, David Block
School of Basic Medical Sciences, Univ. of Illinois

This lesson contains the text of an article from the "New England Journal of Medicine". Its purpose is to provide a focus for the discussion of problems in one area of medical ethics. The article, "Orders Not To Resuscitate", was written by M. T. Rabkin, G. Gillman, and N. R. Rice.

none;none;medical students, law students

Medical history taking

PATIENT ASSESSMENT (ptassess;1980;unpublished)
Richard M Stawicki
Sheppard Air Force Base, Texas

Upon completion of this lesson the student should be able to make subjective and objective observations, given a narrative patient situation, and report them either orally, in writing, or both.

none;none;students of the health sciences

PROBLEM ORIENTED MEDICAL RECORDS (soapie;1981;unpublished)
C A Settlemeyer, Gary W Cathers
Sheppard Air Force Base, Texas

This lesson discusses the components of the problem oriented medical record in relation to the nursing process. The instruction is followed by drill and practice and a test.

none;45 minutes;students of the health sciences, nursing students

Medical laws and legislation

FAILURE TO DIAGNOSE BATTERED-CHILD SYNDROME
(batter;1978;unpublished)
Allan H Levy
School of Basic Medical Sciences, Univ. of Illinois

This lesson contains the text of an article from the "New England Journal of Medicine". Its purpose is to provide a focus for the discussion of problems in one area of medical ethics. The article, written by William J. Curran, presents a summary of a precedent-setting case involving the responsibilities of physicians in battered-child cases.

none;none;medical students, law students

Medical microbiology

MEDICAL MYCOLOGY: SYSTEMIC MYCOSES (fungus;1980;unpublished)
Eunice Schuytema, Marcia Johnson
Rush University, Chicago, Illinois

This tutorial lesson covers the general properties of systemic mycoses, including pathogenesis, epidemiology, and clinical cases. A quiz is included.

none;45 minutes;medical students and students of microbiology and mycology

OPPORTUNISTIC FUNGI: CUTANEOUS AND SUBCUTANEOUS MYCOSES
(afungus;1981;unpublished)
Eunice Schuytema, Christine Cherry
Rush University, Chicago, Illinois

This tutorial lesson in medical mycology discusses opportunistic fungi, cutaneous fungi and subcutaneous fungi. Morphology, epidemiology, pathogenesis, clinical syndromes, diagnosis and therapy are presented.

none;40 minutes;first year medical students and students of microbiology and mycology

THE GENUS BACILLUS: A TUTORIAL LESSON (bacillus;1980;unpublished)
Marcia Johnson, Eunice Schuytema
Rush University, Chicago, Illinois

This lesson covers morphology, metabolism, antigenic structure and pathogenic properties of the genus bacillus. A quiz is included.

none;30 minutes;first year medical students and students of microbiology and bacteriology

Medical microbiology--Examinations, questions, etc.

THE GENUS BACILLUS: A TUTORIAL LESSON (bacillus;1980;unpublished)
Marcia Johnson, Eunice Schuytema
Rush University, Chicago, Illinois

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none;30 minutes;first year medical students and students of microbiology and bacteriology

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Medical mycology

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none;45 minutes;medical students and students of microbiology and mycology

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Eunice Schuytema, Christine Cherry
Rush University, Chicago, Illinois

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none;40 minutes;first year medical students and students of microbiology and mycology

Medical statistics

THE NORMAL DISTRIBUTION AND THE CENTRAL LIMIT THEORUM (hph;1981;unpublished)
Gregory Cowell, Lee Thompson
Rush University, Chicago, Illinois

This tutorial lesson introduces the student to the normal curve and its relationship to the central limit theorum in influential statistics. Interactive graphic displays allow the student to create graphs in response to questions. This lesson was originally developed by J. Cohen, University of Illinois.

none;45 minutes;graduate health systems management students

Medical technology

ANATOMY AND PHYSIOLOGY: CELLS, TISSUES, AND ORGANS (surgap;1979;unpublished)
Richard M Stawicki
Sheppard Air Force Base, Texas

This lesson defines the terms anatomy, physiology, and anatomical position, and identifies the basic composition of the cell, four types of tissue, organs of the body, and systems of the body.

none;none;students of the health sciences

COAGULATION SYSTEMS (coagsys;1980;unpublished)
Nancy A Lee, Lisa Brenner
Rush College, Chicago, Illinois

This hematology lesson presents coagulation factors and groups these factors according to site of synthesis, common characteristics and mode of action. It describes the two major pathways of coagulation and controls that prevent excess clotting. Lab tests for evaluating coagulation and explaining abnormal data are also discussed.

none;1 hour;students of medical technology and hematology

COMMONLY USED DRUGS (comdrug;1980;unpublished)
Thomas Smith
Sheppard Air Force Base, Texas

After completing this lesson the student will be able to differentiate the actions and uses, routes of administration, complications, and contraindications of commonly used anti-infective agents, analgesics, sedatives, antihistamines, and anti-depressants.

none;none;students of the health sciences

INTRODUCTION TO SHOCK (chew3;1969,75,81;unpublished)
Sherrilyn DeJean, Gregory Olson
Indiana University School of Nursing

This lesson presents the basic hemodynamics of shock along with causes and symptoms of the shock state.

none;30 minutes;nursing or medical students

MEDICAL-SURGICAL TERMINOLOGY TEST (stermtst;1980;unpublished)
Richard M Stawicki
Sheppard Air Force Base, Texas

This lesson provides a test for the student on the prefixes, suffixes, and root words which define surgical operations.

none;none;students of the health sciences

MEDICAL-SURGICAL TERMINOLOGY (surgterm;1979;unpublished)
Richard M Stawicki
Sheppard Air Force Base, Texas

This lesson teaches the student to combine prefixes, suffixes, and root words to define surgical operations.

none;none;students of the health sciences

NUTRITIONAL NEEDS (diets;1980;unpublished)
Richard M Stawicki
Sheppard Air Force Base, Texas

After completing the lesson the student should able to select normal nutritional requirements and describe methods for preparing patients for and assisting with meals.

none;none;students of health sciences

PATIENT ASSESSMENT (ptassess;1980;unpublished)
Richard M Stawicki
Sheppard Air Force Base, Texas

Upon completion of this lesson the student should be able to make subjective and objective observations, given a narrative patient situation, and report them either orally, in writing, or both.

none;none;students of the health sciences

PROBLEM ORIENTED MEDICAL RECORDS (soapie;1981;unpublished)
C A Settlemeyer, Gary W Cathers
Sheppard Air Force Base, Texas

This lesson discusses the components of the problem oriented medical record in relation to the nursing process. The instruction is followed by drill and practice and a test.

none;45 minutes;students of the health sciences, nursing students

RED BLOOD CELL INDICES (rbci;1980;unpublished)
Nancy A Lee, Scott Rubenstein
Rush University, Chicago, Illinois

This hematology lesson presents information about the red blood cell indices and how they relate to cellular morphology. Calculation of the indices is also discussed. There is a quiz at the end in which the student must calculate the indices from given values and then answer questions on cell morphology based on the calculated values of the indices.

none;45 minutes;students of medical technology and hematology

SURGICAL PATHOLOGY (surgpath;1979;unpublished)
Richard M Stawicki
Sheppard Air Force Base, Texas

This lesson will familiarize the student with some terms related to pathology and pathological conditions related to surgery.

none;none;students of the health sciences

Medicare

MEDICARE, TITLE XVIII OF THE SOCIAL SECURITY ACT
(care;1980;unpublished)
Linda Edwards, Evelyn Kahn, Larry Kemp
College of Nursing, U of I Med. Center, Chicago, Il.

Upon completion of this lesson the student should be able to analyze the impact of Medicare on the availability and comprehensiveness of health care, apply provisions of Medicare to clients in the community, demonstrate understanding of benefits under Public Aid, and acquire the skills necessary to utilize available health resources as a family advocate.

none;none;nursing students

Medicine--Histology

HISTOLOGY: CYTOLOGY QUIZ (cytology;1980;unpublished)
Eric W Jacobson, James A Colgan, W Franklin Hughes
Rush University, Chicago, Illinois

This lesson provides a twenty question cytology quiz with feedback for correct and incorrect answers.

none;20 minutes;first year medical students and students of histology

HISTOLOGY: ELECTRON MICROGRAPHS (histoem;1981;unpublished)
James A Colgan, M K Haag
Rush University, Chicago, Illinois

This lesson covers subcellular organelles via microfiche projection of electron micrographs. The lesson is divided into three parts: visual identification of the organelles, functions of the organelles, and identification of the organs of tissues most often associated with the organelles.

microfiche;none;first year medical students and students of histology

Medicine--Pathology

RUSH PATH: A SLIDE REVIEW (genpath;1980,81;unpublished)
Henry Tazelaar, Barbara Banner, J Nosal,
Jerry Justic, Sanford Sherman
Rush University, Chicago, Illinois

This three part lesson deals with general pathological processes. With discussion and slide review, the following subjects are treated: cell injury and death, intracellular accumulations and inflammation, cell healing and repair, fluid and hemodynamic derangements, and neoplasia.

microfiche and touch panel;approximately two hours;second year medical students and students of pathology

Medicine--Terminology

MEDICAL TERMINOLOGY (medword;1982;unpublished)
V M Henkels
Southern Illinois University, Carbondale, Illinois
This lesson presents nine practice quizzes to help the student learn medical terminology, and an examination over all.
none;open-ended;students of medicine and the health sciences

MEDICAL-SURGICAL TERMINOLOGY (surgterm;1979;unpublished)
Richard M Stawicki
Sheppard Air Force Base, Texas
This lesson teaches the student to combine prefixes, suffixes, and root words to define surgical operations.
none;none;students of the health sciences

MEDICAL-SURGICAL TERMINOLOGY TEST (stermtst;1980;unpublished)
Richard M Stawicki
Sheppard Air Force Base, Texas
This lesson provides a test for the student on the prefixes, suffixes, and root words which define surgical operations.
none;none;students of the health sciences

SURGICAL PATHOLOGY (surgpath;1979;unpublished)
Richard M Stawicki
Sheppard Air Force Base, Texas
This lesson will familiarize the student with some terms related to pathology and pathological conditions related to surgery.
none;none;students of the health sciences

Medicine, Clinical

BUGS AND DRUGS (bnd;1981;unpublished)
Paul Alfille, Dave Tanaka, Michael S Gorback
University of Illinois School of Medicine
This is a medical game of infectious diseases. Players create a character that journeys through the hospital, encountering diseases and other perils and surviving by using clinical knowledge. Players progress from pre-med to attending status, and have the opportunity to propose medical questions for other students to face.
none;open-ended;medical students, physicians and health professionals

GASP! A SIMULATION OF HUMAN VENTILATION, PULMONARY GAS EXCHANGE, GAS TRANSPORT, METABOLISM ... (gasp;1981;unpublished)
C Dickenson, D Ingram, E J Campbell, N L Jones,
A S Rebuck, K Ahmed, Thomas Stibolt, Jerry Justic,
Lisa Brenner, Chisoo Choi
Rush University, Chicago, Illinois
This research level simulation offers 300 alterable parameters and represents an accurate model of the human respiratory system. Instructional problems are offered to guide novices in the selection of parameters and variables. The model for this lesson was developed at St. Bartholomew's Hospital, London, England and McMaster University, Ontario, Canada.
none;open-ended;second year medical students and students of physiology, pathology and pulmonary medicine

HEARTBREAK: A SIMULATION OF THE HEART AND PERIPHERAL CIRCULATION (heartsim;1980;unpublished)
C Dickenson, K Ahmed, C Goldsmith, D Sackett,
Allen Rovick, Lisa Brenner, Chisoo Choi
Rush University, Chicago, Illinois
This lesson provides a simulation of the heart and peripheral circulation, accounting for the heart inside the chest, systemic arteries and arterioles, and capillary bed and veins collecting blood from the capillary bed and returning it to the heart. The model can simulate most types of generalized heart disease, with the exception of valve lesions.
none;open-ended;first year medical students and students of physiology

Meteorology--Charts, diagrams, etc.

THE SYNOPTIC CODE (synoptic;1981;unpublished)
Valerie Schmid
Laboratory for Atmospheric Research, U of I, Urbana
This introductory lesson provides instruction and practice on decoding the standard symbols on surface weather charts.
none;45 minutes;elementary level meterology students

Metric system

METRIC WEIGHTS AND VOLUME (dv145a;1978;unpublished)
Don Gillies
Danville C. C. School District, Danville, Illinois
This elementary lesson briefly introduces the student to weight and volume in the metric system.
touch panel;none;elementary level students

THE METRIC SYSTEM (dv120b;1978;unpublished)
Kevin Seager
Danville C. C. School District, Danville, Illinois

This lesson provides a very elementary introduction to the metric system for measuring distance. The student learns about millimeters, centimeters, meters and kilometers.

touch panel;none;elementary level students

Microprocessor systems--Terminology

MICROPROCESSOR TERMINOLOGY DRILL (;1980;unpublished)
Carl E DeLong
Construction Eng. Res. Lab., Dept. of the Army

This is an interactive lesson that teaches basic microprocessor terminology to persons unfamiliar with the microprocessing field. The lesson can be found in "micronam".

touch panel;15-20 minutes per session;persons new to the microprocessing field

Midwives

ANALGESIA/ANESTHESIA APPLICATIONS IN NURSE-MIDWIFERY PRACTICE (nmwanes;1977,81;1982)
Sarah J Naber, Richard S Trynda
College of Nursing, U of I Med. Center, Chicago, Il.

This lesson teaches the student to recognize indications for analgesia and anesthesia in the intrapartum period and to manage the cases presented successfully. Each case has several points for student judgement and management.

none;none;nursing students

ANEMIAS OF PREGNANCY (nmwanemia;1977,81;1982)
Sarah J Naber, Richard S Trynda
College of Nursing, U of I Med. Center, Chicago, Il.

The purpose of this lesson is to provide the student with an opportunity to make judgments in the management of anemias of pregnancy based on historical and laboratory data.

touch panel;none;nursing students

DEVELOPMENTAL TASKS OF PREGNANCY (kregl;1977,81;unpublished)
Kathy Regester, Richard S Trynda
College of Nursing, U of I Med. Center, Chicago, Il.

These three lessons provide simulations in which the student is responsible for assessment and management of pregnant patients. The student must make a psychological assessment of each patient and devise a plan of management according to the psychological status of the patient. Other simulations are in "kreg2" and "kreg3".

none;none;nursing students

GRAPHIC ANALYSIS OF LABOR (nmwglabor;1977,81;1982)
Sarah J Naber, Paul Resch
College of Nursing, U of I Med. Center, Chicago, Il.
This lesson teaches the student to recognize the graphic representations of cervical dilation and fetal descent in ideal primigravid and multiparous labors, state statistical limits of normal primigravid and multiparous labor progressions, and use the cervical-dilation-time and fetal-descent-time relationships for assessing labor progress.
none;none;nursing students

HELLO, NURSE-MIDWIFERY STUDENT! (nmwintro;1981;1982)
Richard S Trynda
College of Nursing, U of I Med. Center, Chicago, Il.
This lesson familiarizes the student with some capabilities of the PLATO system in presenting educational materials and allows the student to practice interacting with the computer.
touch panel;none;nursing students

NURSE-MIDWIFERY ASSESSMENT AND MANAGEMENT IN SIMULATED CLINICAL ENCOUNTERS (nmwddx1;1978,81;unpublished)
Carol Lambesis, Sarah J Naber, Teresa Marchese, Richard S Trynda
College of Nursing, U of I Med. Center, Chicago, Il.
In these simulations the student is to establish a patient data base by selecting items from the history, physical, and diagnostic procedures sections presented in the lesson. The student is then to select items necessary to confirm a diagnosis and appropriately manage the case. Other cases can be found in lessons "nmwddx2"-"nmwddx18".
none;none;nursing students

A SIMULATED PATIENT CASE REGARDING THE INTRAUTERINE DEVICE (blackwell;1977,81;unpublished)
Jane Blackwell, Richard S Trynda
College of Nursing, U of I Med. Center, Chicago, Il.
The purpose of this simulation is to act as a refresher lesson for certified nurse-midwives regarding the use of an intrauterine device.
none;none;nurse-midwives, nursing students

THE MATHEMATICS OF DOSAGES (gnmath;1980,81;1982)
Mathematics Module Committee, Richard S Trynda, Larry Kemp
College of Nursing, U of I Med. Center, Chicago, Il.
In this lesson the student will learn to compute dosages for tablets, injections and intravenous medication, convert metric units to apothecary or English units and vice versa, calculate the drip rate per minute and solution rate per hour for intravenous fluids, and apply the acquired knowledge and skills to clinical situations.
none;none;nursing students

Mineralogy

NAME THAT MINERAL (namemin;1980;unpublished)
Dennis Gruner
Southern Illinois University, Carbondale, Illinois
This is a game that measures the student's ability to determine the name of an unknown mineral based on physical properties that are presented.
none;none;students of mineralogy and geology

Momentum

MOMENTUM - FORCE BALANCES (che46;1981;unpublished)
Robert S Tomaskovic, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana
This lesson involves calculation of various forces using the Momentum - Force Balance. The "vector" nature of momentum and force is brought out by two-dimensional problems. The placement of the "control volume" is used to show when an external solid support force is included in the balance. Five practice problems are included.
none;none;chemical engineering students

Monitoring (Hospital care)

Fetal heart

FETAL MONITORING TECHNIQUES (fetalmon;1979,81;1982)
Elizabeth Deutsch, Constance Hevey, Larry Kemp
College of Nursing, U of I Med. Center, Chicago, Il.
This lesson reviews the techniques for using the fetal heart monitor.
none;none;nursing students

FETAL MONITORING: GRAPHIC ANALYSIS (fetal2;1979,81;1982)
Elizabeth Deutsch, Constance Hevey, Larry Kemp
College of Nursing, U of I Med. Center, Chicago, Il.
This lesson discusses and interprets the different types of uterine contraction patterns that can occur during the labor process.
none;none;nursing students

Months

THAT TIME OF YEAR (dv167a;1978;unpublished)
Joan Jamieson, Peter Kolodziej, Gregory Maggs
Danville C. C. School District, Danville, Illinois
This primary lesson presents the concepts of days, months, and seasons.
touch panel;none;primary level students

Motor bus lines

DIAL-A-BUS (buslinel;1973,76;unpublished)
Silas Warner
Indiana University
This lesson is a simple transportation model. The user is challenged to route a bus in the most efficient way, measured ultimately by how much money is made and how many customers are happy with the service.
none;open-ended;general and students of economics or transportation

Multiplication

CROSSNUMBER PUZZLES (dv109b;1978;unpublished)
Brian Smith
Danville C. C. School District, Danville, Illinois
This lesson is a crossword puzzle game in which the student fills in the answers to simple arithmetic problems to solve the puzzle.
none;none;elementary level students

DECIMAL SKILLS III: MULTIPLYING AND DIVIDING DECIMALS (dec3;1978;unpublished)
Errol Magidson
Kennedy-King College, Chicago, Illinois
This lesson teaches the student to find the product of two decimals, insert the decimal point in the product of any two decimals, find the quotient of two numbers where there is a decimal in the dividend, and insert the decimal point in the quotient of two numbers where the divisor is a decimal.
paper and pencil;none;students of basic mathematics, adult education

DECIMAL SKILLS IIIA: MULTIPLYING DECIMALS (dec3a;1980;unpublished)
Errol Magidson
Kennedy-King College, Chicago, Illinois
This lesson teaches the student to find the product of any two decimals and to insert the decimal point in the product of any two decimals.
paper and pencil;none;students of basic mathematics, adult education

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DIVISIBILITY RULES (divr;1980;unpublished)
Errol Magidson
Kennedy-King College, Chicago, Illinois
After completion of this mathematics lesson the student will be able to recognize at a glance whether or not a number is divisible by the most frequent divisors: 2, 3, 5, and 10.
none;none;students of basic mathematics, adult education

FINDING THE GREATEST COMMON DENOMINATOR (gcd;1978;unpublished)
Errol Magidson
Kennedy-King College, Chicago, Illinois
This mathematics lesson provides instruction and practice in finding the greatest common denominator.
none;none;students of basic mathematics, adult education

NUMBER WARS (dv108b;1978;unpublished)
Dirk Grunwald
Danville C. C. School District, Danville, Illinois
With a "space war" scenario, this lesson offers the student practice in addition, subtraction, multiplication and division problems.
none;none;elementary level students

WELCOME TO BLOKIT (dv110b;1978;unpublished)
Damon Scaggs
Danville C. C. School District, Danville, Illinois
This is a mathematics game of Bingo in which the student tries to get four numbers in a row on the playing card by using combinations of two dice rolls given by the computer.
none;none;elementary level students

WELCOME TO SUM-THING (dv115b;1978;unpublished)
Ken Metheny
Danville C. C. School District, Danville, Illinois
This elementary math drill gives the student a block of numbers and asks the student to pick two adjacent numbers that equal the desired value.
touch panel;none;elementary level students

Multiplication--Tables

NAPIER'S BONES (napier;1975;unpublished)
Silas Warner
Indiana University
Using a set of simple tables (bones), Napier developed a method of multiplication using only addition. This lesson shows how the method works, and gives the student instructions for making his or her own "bones".
none;30 minutes;general

Music

Theory and fundamentals

AN INTRODUCTION TO VOICE LEADING (voicel;1979;unpublished)
Gary Wittlich, Jon A Conrad
Indiana Univeristy School of Music

This lesson is designed to provide drill in basic four-part voice leading situations. The user may choose among various types of choral progressions and may elect to specify the key each time or to have it chosen by the computer.

none;open-ended;music students

CHORD SPELLING: IDENTIFICATION OF CHORD ROOT AND SONORITY (staves;1977,78;unpublished)
Allen Winold, Jon A Conrad, Gregory Olson
Indiana University School of Music

This lesson provides drill in identification of triads and seventh chords in all inversions and voicings. The student may see a summary of his/her results and may vary the difficulty of the drill by changing clef type, chord type and position, triad quality, accidentals and chord voicings, as well as the time allowed for each answer.

none;open-ended;music students

IDENTIFICATION OF CHORD ROOT AND SONORITY (chords;1978;unpublished)
Allen Winold, Gary Wittlich, Jon A Conrad, Gregory Olson
Indiana University School of Music

This music lesson is designed to help students correctly identify triad roots and sonorities or qualities. The student is given a pretest to determine his/her level of mastery.

none;10-40 minutes, depending on student's mastery;music students

LEARNING SCALES AND CHORDS IN MOD 12 (iumus;1977;unpublished)
Allen Winold, Terri Poff, Marshall Midden
Indiana University School of Music

This lesson is designed to help students learn how to apply Mod 12 musical notation to different pitches and to any of 24 different "materials" (triads, scales, modes, chords). Exercises are included to assess the student's knowledge.

none;30-50 minutes;music theory students

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PITCH CLASS SETS (pcsets1;1976,77;unpublished)
Gary Wittlich, Nathan F Syfrig, Steve Stone,
Jon A Conrad
Indiana University School of Music

The purpose of the musical pitch class sets lessons is to introduce students to a type of symbolism useful for describing sets of notes, particularly for sets in twentieth century music. The instructional part of the lesson continues in "pcsets2" and exercises are in lesson "pcsets3".

none;90 minutes for all three lessons;university level music students

Music--Bibliography

COMPUTER APPLICATIONS IN MUSIC -- AN ONLINE BIBLIOGRAPHY (musbib;1979;unpublished)
John M Eddins, G. David Peters
Southern Illinois University / University of Illinois

This lesson provides an online bibliography of published materials pertaining to applications of computers to music instruction, research, analysis, and composition. Searches may be made by author, title, subject, or any combination of the three.

none;open-ended;music researchers

Music--History and chronology

COMPUTERS AND MUSIC INSTRUCTION: A BRIEF SURVEY (muscai;1978;unpublished)
Gary Wittlich, Jon A Conrad
Indiana University School of Music

This lesson discusses the past, present and future of computer-based music instruction. Topics treated are: the history and some early courseware, a model for an automated music learning center, the National Consortium for Computer-based Music Instruction, and the present state of computer-based music instruction and its needs.

none;30 minutes;music students and instructors; persons interested in CAI/CMI/CBE

Music--Instruction and study--Computer-assisted instruction

COMPUTERS AND MUSIC INSTRUCTION: A BRIEF SURVEY (muscai;1978;unpublished)
Gary Wittlich, Jon A Conrad
Indiana University School of Music

This lesson discusses the past, present and future of computer-based music instruction. Topics treated are: the history and some early courseware, a model for an automated music learning center, the National Consortium for Computer-based Music Instruction, and the present state of computer-based music instruction and its needs.

none;30 minutes;music students and instructors; persons interested in CAI/CMI/CBE

Musical notation

LEARNING SCALES AND CHORDS IN MOD 12 (iumus;1977;unpublished)
Allen Winold, Terri Poff, Marshall Midden
Indiana University School of Music
This lesson is designed to help students learn how to apply Mod 12 musical notation to different pitches and to any of 24 different "materials" (triads, scales, modes, chords). Exercises are included to assess the student's knowledge.
none;30-50 minutes;music theory students

Musicology

COMPUTER APPLICATIONS IN MUSIC -- AN ONLINE BIBLIOGRAPHY (musbib;1979;unpublished)
John M Eddins, G. David Peters
Southern Illinois University / University of Illinois
This lesson provides an online bibliography of published materials pertaining to applications of computers to music instruction, research, analysis, and composition. Searches may be made by author, title, subject, or any combination of the three.
none;open-ended;music researchers

Mycology

MEDICAL MYCOLOGY: SYSTEMIC MYCOSES (fungus;1980;unpublished)
Eunice Schuytema, Marcia Johnson
Rush University, Chicago, Illinois
This tutorial lesson covers the general properties of systemic mycoses, including pathogenesis, epidemiology, and clinical cases. A quiz is included.
none;45 minutes;medical students and students of microbiology and mycology

OPPORTUNISTIC FUNGI: CUTANEOUS AND SUBCUTANEOUS MYCOSES (afungus;1981;unpublished)
Eunice Schuytema, Christine Cherry
Rush University, Chicago, Illinois
This tutorial lesson in medical mycology discusses opportunistic fungi, cutaneous fungi and subcutaneous fungi. Morphology, epidemiology, pathogenesis, clinical syndromes, diagnosis and therapy are presented.
none;40 minutes;first year medical students and students of microbiology and mycology

Mycosis

MEDICAL MYCOLOGY: SYSTEMIC MYCOSES (fungus;1980;unpublished)
Eunice Schuytema, Marcia Johnson
Rush University, Chicago, Illinois
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none;45 minutes;medical students and students of microbiology and mycology

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Eunice Schuytema, Christine Cherry
Rush University, Chicago, Illinois
This tutorial lesson in medical mycology discusses opportunistic fungi, cutaneous fungi and subcutaneous fungi. Morphology, epidemiology, pathogenesis, clinical syndromes, diagnosis and therapy are presented.
none;40 minutes;first year medical students and students of microbiology and mycology

Negligence

NEGLIGENCE: IDENTIFYING ASSUMPTIONS (carl1;1979;unpublished)
Robert C Platt
Antioch Law School, Washington, D. C.
This law lesson defines terms related to negligence and presents two cases to illustrate the concepts.
none;none;law students

Neurology

UPPER AND LOWER MOTOR NEURON LESIONS (lesion;1981;unpublished)
Dave Neighbors, Brian A Curtis, Peggy E Dengler
Peoria School of Medicine of the Univ. of Illinois
This lesson introduces the concepts of upper and lower motor neuron lesions. Signs of the condition are presented and the relevance of the reflex arc is discussed as well as demonstrated via animation. Case studies are presented and the learner then applies the content in simple case analysis.
none;none;students of health science, entry level medical students

Neuromuscular transmission

UPPER AND LOWER MOTOR NEURON LESIONS (lesion;1981;unpublished)
Dave Neighbors, Brian A Curtis, Peggy E Dengler
Peoria School of Medicine of the Univ. of Illinois
This lesson introduces the concepts of upper and lower motor neuron lesions. Signs of the condition are presented and the relevance of the reflex arc is discussed as well as demonstrated via animation. Case studies are presented and the learner then applies the content in simple case analysis.
none;none;students of health science, entry level medical students

Neurophysiology

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Dave Neighbors, Brian A Curtis, Peggy E Dengler
Peoria School of Medicine of the Univ. of Illinois

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none;none;students of health science, entry level medical students

Numbers, Complex

COMPLEX NUMBERS (complx1;1981;unpublished)
Larry Dornhoff
Dept. of Mathematics, University of Illinois, Urbana

This lesson introduces complex numbers with exercises in the addition, subtraction, multiplication, division, and conjugation of complex numbers.

none;15-30 minutes;high school and college algebra students

Numbers, Prime

PRIME NUMBERS (dv144b;1978;unpublished)
Dirk Grunwald
Danville C. C. School District, Danville, Illinois

This elementary lesson teaches the student about prime numbers and how to identify them. There is also a game section in which the student must "trap" aliens marked with prime numbers.

none;none;elementary level students

Numbers, Random

LINEAR CONGRUENTIAL RANDOM NUMBER GENERATOR (rng;1976;unpublished)
David V Meller
Comp.-based Educ. Res. Lab., University of Illinois

By setting parameters the student can generate linear congruential random numbers and perform three different statistical tests.

none;open-ended;students of electrical engineering

ss123

Nurses and nursing

Gynecologic nursing

A SIMULATED PATIENT CASE REGARDING THE INTRAUTERINE DEVICE (blackwell;1977,81;unpublished)
Jane Blackwell, Richard S Trynda
College of Nursing, U of I Med. Center, Chicago, Il.

The purpose of this simulation is to act as a refresher lesson for certified nurse-midwives regarding the use of an intrauterine device.

none;none;nurse-midwives, nursing students

Maternal health services

FETAL CIRCULATION (mnurse6;1975;unpublished)
Maryann Bitzer, Martha Boudreaux, Donald Bitzer
Mercy Hospital School of Nursing, Urbana, Ill.

After completing this lesson the student should be able to describe the development of placental circulation, explain the differences between the fetal and mature circulatory systems, and trace the flow of blood through the fetal circulatory system.

microfiche;none;nursing students

Obstetrical nursing

AMNIOTIC FLUID (mnurse9;1975;unpublished)
Maryann Bitzer, Martha Boudreaux
Mercy Hospital School of Nursing, Urbana, Ill.

Upon completion of this lesson the student will be able to list the characteristics and describe the functions of amniotic fluid, and recognize some of its uses in prenatal diagnosis.

none;none;nursing students

ANALGESIA/ANESTHESIA APPLICATIONS IN NURSE-MIDWIFERY PRACTICE (nmwanes;1977,81;1982)
Sarah J Naber, Richard S Trynda
College of Nursing, U of I Med. Center, Chicago, Il.

This lesson teaches the student to recognize indications for analgesia and anesthesia in the intrapartum period and to manage the cases presented successfully. Each case has several points for student judgement and management.

none;none;nursing students

ANEMIAS OF PREGNANCY (nmwanemia;1977,81;1982)
Sarah J Naber, Richard S Trynda
College of Nursing, U of I Med. Center, Chicago, Il.

The purpose of this lesson is to provide the student with an opportunity to make judgments in the management of anemias of pregnancy based on historical and laboratory data.

touch panel;none;nursing students

ss124

DEVELOPMENTAL TASKS OF PREGNANCY (kreg1;1977,81;unpublished)

Kathy Regester, Richard S Trynda
College of Nursing, U of I Med. Center, Chicago, Il.

These three lessons provide simulations in which the student is responsible for assessment and management of pregnant patients. The student must make a psychological assessment of each patient and devise a plan of management according to the psychological status of the patient. Other simulations are in "kreg2" and "kreg3".

none;none;nursing students

FETAL CIRCULATION (mnurse6;1975;unpublished)

Maryann Bitzer, Martha Boudreaux, Donald Bitzer
Mercy Hospital School of Nursing, Urbana, Ill.

After completing this lesson the student should be able to describe the development of placental circulation, explain the differences between the fetal and mature circulatory systems, and trace the flow of blood through the fetal circulatory system.

microfiche;none;nursing students

FETAL MONITORING TECHNIQUES (fetalmon;1979,81;1982)

Elizabeth Deutsch, Constance Hevey, Larry Kemp
College of Nursing, U of I Med. Center, Chicago, Il.

This lesson reviews the techniques for using the fetal heart monitor.

none;none;nursing students

FETAL MONITORING: GRAPHIC ANALYSIS (fetal2;1979,81;1982)

Elizabeth Deutsch, Constance Hevey, Larry Kemp
College of Nursing, U of I Med. Center, Chicago, Il.

This lesson discusses and interprets the different types of uterine contraction patterns that can occur during the labor process.

none;none;nursing students

GRAPHIC ANALYSIS OF LABOR (nmwglabor;1977,81;1982)

Sarah J Naber, Paul Resch
College of Nursing, U of I Med. Center, Chicago, Il.

This lesson teaches the student to recognize the graphic representations of cervical dilation and fetal descent in ideal primigravid and multiparous labors, state statistical limits of normal primigravid and multiparous labor progressions, and use the cervical-dilation-time and fetal-descent-time relationships for assessing labor progress.

none;none;nursing students

ss125

NURSE-MIDWIFERY ASSESSMENT AND MANAGEMENT IN SIMULATED CLINICAL ENCOUNTERS (nmwddx1;1978,81;unpublished)
Carol Lambesis, Sarah J Naber, Teresa Marchese, Richard S Trynda
College of Nursing, U of I Med. Center, Chicago, Il.

In these simulations the student is to establish a patient data base by selecting items from the history, physical, and diagnostic procedures sections presented in the lesson. The student is then to select items necessary to confirm a diagnosis and appropriately manage the case. Other cases can be found in lessons "nmwddx2"-"nmwddx18".

none;none;nursing students

WELCOME TO TIC TAC TOE (tic;1982;unpublished)
C Staatse, Sherry Gordon, Jan Predmore
Parkland College, Champaign, Illinois

This is a tic-tac-toe game in which the student answers nursing questions on labor and delivery.

touch panel;open-ended;nursing students

Pediatric nursing

NURSING MANAGEMENT OF THE PEDIATRIC CARDIAC PATIENT (nmpcp1;1978,81;1982)
Dorothy P Colsant, Richard S Trynda
College of Nursing, U of I Med. Center, Chicago, Il.

These four lessons provide simulations in which the student is responsible for assessment and management of the pediatric cardiac patient. In each lesson the student must review the child's case and devise a management plan for the child and parents. Other simulations are found in "nmpcp2", "nmpcp3", and "nmpcp4".

none;none;nursing students

PLATO keyboard

HELLO, NURSE-MIDWIFERY STUDENT! (nmwintro;1981;1982)
Richard S Trynda
College of Nursing, U of I Med. Center, Chicago, Il.

This lesson familiarizes the student with some capabilities of the PLATO system in presenting educational materials and allows the student to practice interacting with the computer.

touch panel;none;nursing students

ss126

Psychiatric nursing

ANXIETY (anxious;1981;1982)
Janice M Layton
College of Nursing, U of I Med. Center, Chicago, Il.
This lesson defines anxiety, its threat to physical and psychological security, interpersonal communications, and the physiological, perceptual, mental and behavioral effects of anxiety.
none;none;nursing students

THE CONCEPT OF DEPENDENCE (depend;1981;unpublished)
Kathryne Dockstader, Beverly Bernstein,
Janice M Layton
College of Nursing, U of I Med. Center, Chicago, Il.
This lesson helps the student to define dependence, to identify normal dependency needs at various stages of development, and to recognize manifestations of abnormal dependency needs.
none;none;nursing students

Public health nursing

MEDICAID, TITLE XIX OF THE SOCIAL SECURITY ACT (medicaid;1981;unpublished)
Evelyn Kahn, Linda Edwards, Larry Kemp
College of Nursing, U of I Med. Center, Chicago, Il.
Upon completion of this lesson the student should be able to analyze the impact of Medicaid on the availability and comprehensiveness of health care, apply provisions of Medicaid to clients in the community, demonstrate understanding of benefits under Public Aid, and acquire the skills necessary to utilize available health resources as a family advocate.
none;none;nursing students

MEDICARE, TITLE XVIII OF THE SOCIAL SECURITY ACT (care;1980;unpublished)
Linda Edwards, Evelyn Kahn, Larry Kemp
College of Nursing, U of I Med. Center, Chicago, Il.
Upon completion of this lesson the student should be able to analyze the impact of Medicare on the availability and comprehensiveness of health care, apply provisions of Medicare to clients in the community, demonstrate understanding of benefits under Public Aid, and acquire the skills necessary to utilize available health resources as a family advocate.
none;none;nursing students

PROBLEM ORIENTED MEDICAL RECORDS (soapie;1981;unpublished)
C A Settlemeyer, Gary W Cathers
Sheppard Air Force Base, Texas
This lesson discusses the components of the problem oriented medical record in relation to the nursing process. The instruction is followed by drill and practice and a test.
none;45 minutes;students of the health sciences, nursing students

PUZZLE 2 (puzzle2;1977;unpublished)
Sherry Gordon, Jeff Ruffner
Parkland College, Champaign, Illinois
This lesson contains a crossword puzzle of nursing terms.
none;open-ended;nursing students

THE USE OF THEORY IN RESEARCH (rnurse;1981;unpublished)
Jane Llewellyn, Jerry Justic
Rush University, Chicago, Illinois
This tutorial nursing lesson treats the interrelationship of theory and research and the function of a theoretical framework for conducting research. Sections include a review of definitions, types and purposes of theory, the interrelationship of theory and research, and a short post-test.
none;40 minutes;nursing students at the master's level

Nurses and nursing--Problems, exercises, etc.

THE MATHEMATICS OF DOSAGES (gnmath;1980,81;1982)
Mathematics Module Committee, Richard S Trynda,
Larry Kemp
College of Nursing, U of I Med. Center, Chicago, Il.
In this lesson the student will learn to compute dosages for tablets, injections and intravenous medication, convert metric units to apothecary or English units and vice versa, calculate the drip rate per minute and solution rate per hour for intravenous fluids, and apply the acquired knowledge and skills to clinical situations.
none;none;nursing students

Nursing research

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Rush University, Chicago, Illinois
This tutorial nursing lesson treats the interrelationship of theory and research and the function of a theoretical framework for conducting research. Sections include a review of definitions, types and purposes of theory, the interrelationship of theory and research, and a short post-test.
none;40 minutes;nursing students at the master's level

Nusselt number

HEAT TRANSFER COEFFICIENTS (che30;1979;unpublished)
Michael Gilbert, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana
This lesson presents heat transfer, demonstrating the additive resistances in an overall heat transfer coefficient. The estimation of individual coefficients for flow in tubes is also demonstrated. There are five practice problems.
none;none;chemical engineering students

Nutrition

NUTRITIONAL NEEDS (diets;1980;unpublished)
Richard M Stawicki
Sheppard Air Force Base, Texas
After completing the lesson the student should able to select normal nutritional requirements and describe methods for preparing patients for and assisting with meals.
none;none;students of health sciences

Obstetrical nursing

AMNIOTIC FLUID (mnurse9;1975;unpublished)
Maryann Bitzer, Martha Boudreaux
Mercy Hospital School of Nursing, Urbana, Ill.
Upon completion of this lesson the student will be able to list the characteristics and describe the functions of amniotic fluid, and recognize some of its uses in prenatal diagnosis.
none;none;nursing students

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This lesson teaches the student to recognize indications for analgesia and anesthesia in the intrapartum period and to manage the cases presented successfully. Each case has several points for student judgement and management.
none;none;nursing students

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Sarah J Naber, Richard S Trynda
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The purpose of this lesson is to provide the student with an opportunity to make judgments in the management of anemias of pregnancy based on historical and laboratory data.
touch panel;none;nursing students

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none;none;nursing students

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Mercy Hospital School of Nursing, Urbana, Ill.

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microfiche;none;nursing students

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Elizabeth Deutsch, Constance Hevey, Larry Kemp
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This lesson discusses and interprets the different types of uterine contraction patterns that can occur during the labor process.

none;none;nursing students

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This lesson teaches the student to recognize the graphic representations of cervical dilation and fetal descent in ideal primigravid and multiparous labors, state statistical limits of normal primigravid and multiparous labor progressions, and use the cervical-dilation-time and fetal-descent-time relationships for assessing labor progress.

none;none;nursing students

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none;none;nursing students

WELCOME TO TIC TAC TOE (tic;1982;unpublished)
C Staatse, Sherry Gordon, Jan Predmore
Parkland College, Champaign, Illinois

This is a tic-tac-toe game in which the student answers nursing questions on labor and delivery.

touch panel;open-ended;nursing students

Oral communication

SPEECH ANXIETY (anxiety;1979;unpublished)
Mary Hinchcliff
Dept. of Speech Communication, SIU, Carbondale, Ill.

This lesson is a program of systematic desensitization developed for the reduction of speech anxiety ("stage fright"). The lesson has three sections: 1) introductory information about speech anxiety and systematic desensitization, 2) progressive relaxation exercises, and 3) visualization exercises.

none;30 minutes;students in public speaking classes (any level)

Outlines

OUTLINING TO PREPARE FOR WRITING COMPOSITIONS (outline1;1979;unpublished)
Rita Silveri, Peter Zelchenko
Chicago City Colleges

This lesson teaches the student to use outlines to plan and organize for composition writing.

none;none;composition students

Paramedical education

ANATOMY AND PHYSIOLOGY: CELLS, TISSUES, AND ORGANS (surgap;1979;unpublished)
Richard M Stawicki
Sheppard Air Force Base, Texas
This lesson defines the terms anatomy, physiology, and anatomical position, and identifies the basic composition of the cell, four types of tissue, organs of the body, and systems of the body.
none;none;students of the health sciences

COAGULATION SYSTEMS (coagsys;1980;unpublished)
Nancy A Lee, Lisa Brenner
Rush College, Chicago, Illinois
This hematology lesson presents coagulation factors and groups these factors according to site of synthesis, common characteristics and mode of action. It describes the two major pathways of coagulation and controls that prevent excess clotting. Lab tests for evaluating coagulation and explaining abnormal data are also discussed.
none;1 hour;students of medical technology and hematology

COMMONLY USED DRUGS (comdrug;1980;unpublished)
Thomas Smith
Sheppard Air Force Base, Texas
After completing this lesson the student will be able to differentiate the actions and uses, routes of administration, complications, and contraindications of commonly used anti-infective agents, analgesics, sedatives, antihistamines, and anti-depressants.
none;none;students of the health sciences

INTRODUCTION TO SHOCK (chew3;1969,75,81;unpublished)
Sherrilyn DeJean, Gregory Olson
Indiana University School of Nursing
This lesson presents the basic hemodynamics of shock along with causes and symptoms of the shock state.
none;30 minutes;nursing or medical students

MEDICAL-SURGICAL TERMINOLOGY (surgterm;1979;unpublished)
Richard M Stawicki
Sheppard Air Force Base, Texas
This lesson teaches the student to combine prefixes, suffixes, and root words to define surgical operations.
none;none;students of the health sciences

MEDICAL-SURGICAL TERMINOLOGY TEST (stermtst;1980;unpublished)
Richard M Stawicki
Sheppard Air Force Base, Texas
This lesson provides a test for the student on the prefixes, suffixes, and root words which define surgical operations.
none;none;students of the health sciences

NUTRITIONAL NEEDS (diets;1980;unpublished)
Richard M Stawicki
Sheppard Air Force Base, Texas
After completing the lesson the student should able to select normal nutritional requirements and describe methods for preparing patients for and assisting with meals.
none;none;students of health sciences

PATIENT ASSESSMENT (ptassess;1980;unpublished)
Richard M Stawicki
Sheppard Air Force Base, Texas
Upon completion of this lesson the student should be able to make subjective and objective observations, given a narrative patient situation, and report them either orally, in writing, or both.
none;none;students of the health sciences

PROBLEM ORIENTED MEDICAL RECORDS (soapie;1981;unpublished)
C A Settlemeyer, Gary W Cathers
Sheppard Air Force Base, Texas
This lesson discusses the components of the problem oriented medical record in relation to the nursing process. The instruction is followed by drill and practice and a test.
none;45 minutes;students of the health sciences, nursing students

RED BLOOD CELL INDICES (rbci;1980;unpublished)
Nancy A Lee, Scott Rubenstein
Rush University, Chicago, Illinois
This hematology lesson presents information about the red blood cell indices and how they relate to cellular morphology. Calculation of the indices is also discussed. There is a quiz at the end in which the student must calculate the indices from given values and then answer questions on cell morphology based on the calculated values of the indices.
none;45 minutes;students of medical technology and hematology

SURGICAL PATHOLOGY (surgpath;1979;unpublished)
Richard M Stawicki
Sheppard Air Force Base, Texas
This lesson will familiarize the student with some terms related to pathology and pathological conditions related to surgery.
none;none;students of the health sciences

Parasympathomimetic agents

CHOLINERGIC MECHANISMS (pha04;1981;unpublished)
Darin Brox, D Cook
University of Alberta, Canada
This pharmacology lesson presents the structure, toxicity, receptors, locus of muscarinic sites, and antagonists of cholinergic mechanisms.
touch panel;20 minutes;students of pharmacology

Parts of speech

PARTS OF SPEECH: ADJECTIVES (dv173a;1978;unpublished)
Lindsay Reichmann
Danville C. C. School District, Danville, Illinois
This elementary lesson illustrates adjectives and then drills the student on his or her understanding.
optional touch panel;none;elementary level students

Patent laws and legislation

CONDITIONS FOR PATENTABILITY, NON-OBVIOUS SUBJECT MATTER (patents;1973,74;unpublished)
Robert M Hammes, Peter B Maggs
College of Law, University of Illinois, Urbana, Ill.
This lesson deals with five Supreme Court patentability cases. An hypothetical fact situation follows which is accompanied by a series of questions. The student is to answer the questions, referring to the cases presented for legal basis.
none;none;students of law

Pathology

PHYSIOLOGY AND PATHOLOGY OF CARDIOVASCULAR SHOCK (cvshock;1978;unpublished)
Steven R White
U of I College of Medicine, Chicago, Illinois
This lesson discusses the different types of shock and their effects on the cardiovascular system. Questions are asked during the instruction and there is a quiz at the end of the lesson.
none;40 minutes;students of medicine

Pathology, Cellular

RUSH PATH: A SLIDE REVIEW (genpath;1980,81;unpublished)
Henry Tazelaar, Barbara Banner, J Nosal,
Jerry Justic, Sanford Sherman
Rush University, Chicago, Illinois

This three part lesson deals with general pathological processes. With discussion and slide review, the following subjects are treated: cell injury and death, intracellular accumulations and inflammation, cell healing and repair, fluid and hemodynamic derangements, and neoplasia.

microfiche and touch panel;approximately two hours;second year medical students and students of pathology

Pediatric cardiology

NURSING MANAGEMENT OF THE PEDIATRIC CARDIAC PATIENT (nmpcp1;1978,81;1982)
Dorothy P Colsant, Richard S Trynda
College of Nursing, U of I Med. Center, Chicago, Il.

These four lessons provide simulations in which the student is responsible for assessment and management of the pediatric cardiac patient. In each lesson the student must review the child's case and devise a management plan for the child and parents. Other simulations are found in "nmpcp2", "nmpcp3", and "nmpcp4".

none;none;nursing students

Pediatric nursing

NURSING MANAGEMENT OF THE PEDIATRIC CARDIAC PATIENT (nmpcp1;1978,81;1982)
Dorothy P Colsant, Richard S Trynda
College of Nursing, U of I Med. Center, Chicago, Il.

These four lessons provide simulations in which the student is responsible for assessment and management of the pediatric cardiac patient. In each lesson the student must review the child's case and devise a management plan for the child and parents. Other simulations are found in "nmpcp2", "nmpcp3", and "nmpcp4".

none;none;nursing students

Percentage

PERCENT SKILLS I: CONVERSIONS (per1;1978;unpublished)
Errol Magidson
Kennedy-King College, Chicago, Illinois

This lesson teaches the student to change any decimal to a percent and any percent to a decimal, and also to change any fraction or mixed number to a percent and back again.

paper and pencil;none;students of basic mathematics, adult education

PERCENT SKILLS II: BASIC WORD PROBLEMS
(per2;1978;unpublished)
Errol Magidson
Kennedy-King College, Chicago, Illinois
This lesson teaches the student to identify the three basic numbers used in most word problems using percent, and to solve very basic word problems using percent.
paper and pencil;none;students of basic mathematics, adult education

PERCENT SKILLS IV: DIFFICULT WORD PROBLEMS
(per4;1978;unpublished)
Errol Magidson
Kennedy-King College, Chicago, Illinois
This lesson presents the student with difficult word problems using percent.
paper and pencil;none;students of basic mathematics, adult education

PERCENT SKILLS: QUIZ (per3;1978;unpublished)
Errol Magidson
Kennedy-King College, Chicago, Illinois
This lesson provides a quiz covering the material presented in the "Percent Skills" lessons.
none;none;students of basic mathematics, adult education

Pharmacology

Autonomic nervous system

AUTONOMIC NERVOUS SYSTEM REVIEW QUIZ (pha08;1974,81;unpublished)
Darin Brox, R J Reiffenstein
University of Alberta, Canada / University of Kansas
This lesson provides twenty review questions on the autonomic nervous system. Alpha and beta adrenergics and catecholamines are covered. Some of the questions relate autonomic nervous system pharmacology to clinical situations. The student receives feedback for each question.
touch panel;20 minutes;students of pharmacology

CATECHOLAMINE BIOSYNTHESIS (pha05;1981;unpublished)
Darin Brox, D Cook
University of Alberta, Canada
This lesson reviews catecholamine biosynthesis. Synthesis sites and stages are shown, and drug effects and clinical aspects are discussed. The student is asked questions after each section.
touch panel;15 minutes;students of pharmacology

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CHOLINERGIC MECHANISMS (pha04;1981;unpublished)
Darin Brox, D Cook
University of Alberta, Canada
This pharmacology lesson presents the structure, toxicity, receptors, locus of muscarinic sites, and antagonists of cholinergic mechanisms.
touch panel;20 minutes;students of pharmacology

CHOLINESTERASE (pha06;1981;unpublished)
Darin Brox, D Cook
University of Alberta, Canada
This lesson provides a review of acetylcholinesterase as well as cholinesterase inhibitors. Effects of the compound are related to clinical situations and each section is followed by a short quiz.
touch panel;20 minutes;students of pharmacology

INTRODUCTION TO AUTONOMIC PHARMACOLOGY (pha07;1981;unpublished)
Darin Brox, D Cook
University of Alberta, Canada
This lesson discusses various aspects of the autonomic nervous system and tests the student's understanding of the material with periodic questions.
touch panel;15 minutes;students of pharmacology

INTRODUCTION TO PSYCHOTROPIC DRUGS (psycho;1981;unpublished)
Sandra Y Barnes, Sylvia A Mann, Erica M Trausch, Larry Kemp
College of Nursing, U of I Med. Center, Chicago, Il.
This lesson discusses the effects of drugs on the autonomic nervous system.
none;none;nursing students

REVIEW OF ALPHA-ADRENERGICS (pha87;1974,81;unpublished)
Darin Brox, Cathy Adams
University of Alberta, Canada / University of Kansas
This lesson provides a brief summary of alpha-adrenergics, sixteen review questions with feedback, and a list of related key words and phrases.
touch panel;20 minutes;students of pharmacology

THE NICOTINIC CHOLINERGIC SYSTEM (pha84;1974,81;unpublished)
Darin Brox, Cathy Adams
University of Alberta, Canada / University of Kansas
This lesson presents a brief summary of the nicotinic cholinergic system, thirteen review questions with feedback, and a list of related key words and phrases.
touch panel;15 minutes;students of pharmacology

Autonomic nervous system--Examinations, questions, etc.
AUTONOMIC NERVOUS SYSTEM REVIEW QUIZ (pha08;1974,81;unpublished)
Darin Brox, R J Reiffenstein
University of Alberta, Canada / University of Kansas
This lesson provides twenty review questions on the autonomic nervous system. Alpha and beta adrenergics and catecholamines are covered. Some of the questions relate autonomic nervous system pharmacology to clinical situations. The student receives feedback for each question.
touch panel;20 minutes;students of pharmacology

Central nervous system
HYPNOTICS AND SEDATIVES (phc20;1974,81;unpublished)
R J Reiffenstein, Darin Brox
University of Alberta, Canada / University of Kansas
This lesson provides a review of sedatives and hypnotics and a ten question quiz over the material. The student may choose to do either.
touch panel;15 minutes;students of pharmacology

REVIEW OF BETA-ADRENERGIC DRUGS (pha88;1974,81;unpublished)
Darin Brox, Cathy Adams
University of Alberta, Canada / University of Kansas
This lesson provides a brief summary of beta-adrenergics, eighteen review questions, and a list of related key words and phrases.
touch panel;20 minutes;students of pharmacology

Psychopharmacology
INTRODUCTION TO PSYCHOTROPIC DRUGS (psycho;1981;unpublished)
Sandra Y Barnes, Sylvia A Mann, Erica M Trausch,
Larry Kemp
College of Nursing, U of I Med. Center, Chicago, Il.
This lesson discusses the effects of drugs on the autonomic nervous system.
none;none;nursing students

Renal pharmacology
DIURETICS QUIZ (pha22;1974,81;unpublished)
Darin Brox, R M Henderson
University of Alberta, Canada / University of Kansas
This lesson presents ten questions on mercurial and osmotic diuretics and their effectiveness. The student receives feedback on each response.
touch panel;10 minutes;students of pharmacology

Toxicology

CHOLINERGIC MECHANISMS (pha04;1981;unpublished)
Darin Brox, D Cook
University of Alberta, Canada
This pharmacology lesson presents the structure, toxicity, receptors, locus of muscarinic sites, and antagonists of cholinergic mechanisms.
touch panel;20 minutes;students of pharmacology

COMMONLY USED DRUGS (comdrug;1980;unpublished)
Thomas Smith
Sheppard Air Force Base, Texas
After completing this lesson the student will be able to differentiate the actions and uses, routes of administration, complications, and contraindications of commonly used anti-infective agents, analgesics, sedatives, antihistamines, and anti-depressants.
none;none;students of the health sciences

Pharmacy--Weights and measures

THE MATHEMATICS OF DOSAGES (gnmath;1980,81;1982)
Mathematics Module Committee, Richard S Trynda, Larry Kemp
College of Nursing, U of I Med. Center, Chicago, Il.
In this lesson the student will learn to compute dosages for tablets, injections and intravenous medication, convert metric units to apothecary or English units and vice versa, calculate the drip rate per minute and solution rate per hour for intravenous fluids, and apply the acquired knowledge and skills to clinical situations.
none;none;nursing students

Philosophy, Comparative

COMPARATIVE PHILOSOPHY (phil1;1980;unpublished)
Jerry W Joplin, Emil R Spees
Southern Illinois University, Carbondale, Illinois
This is an introductory course in philosophy for students who are interested in learning the relevancy of philosophy to their given subject matter.
none;none;persons interested in comparative philosophy

Phonetics

"OO" SOUNDS (dv160a;1978;unpublished)
Joan Jamieson, Mike Hollander
Danville C. C. School District, Danville, Illinois
This lesson teaches the student to differentiate between the different "oo" sounds.
touch panel;none;elementary level students

CONSONANT BLENDS (dvl64a;1979;unpublished)
Joan Jamieson, Gregory Maggs
Danville C. C. School District, Danville, Illinois
This lesson presents some cases in which two consonants make one sound. The sounds treated are blends formed with "r" and "l".
touch panel;none;elementary level students

DIGRAPHS (dvl63a;1979;unpublished)
Joan Jamieson, Gregory Maggs
Danville C. C. School District, Danville, Illinois
This lesson presents some cases in which two consonants make one sound. The sounds included are: sh, ch, wh, th, ng, and nk.
touch panel;none;elementary level students

THREE LETTER BLENDS (dvl69a;1979;unpublished)
Joan Jamieson, Mike Hollander
Danville C. C. School District, Danville, Illinois
This lesson presents some cases in which three consonants make one sound. The following sounds are treated: scr, str, spr, thr, spl, and shr.
touch panel;none;elementary level students

Physical education and training

A QUALITATIVE ANALYSIS OF THE FOREHAND STROKE IN TENNIS (tenfml;1981;unpublished)
Larry Good, Diann Gordon
Southern Illinois University, Carbondale, Illinois
This two unit lesson teaches the student to analyze human motion and understand the underlying principles, and to apply the mechanical principles of force and motion to an analysis of the forehand stroke in tennis.
none;none;students of physical education; persons interested in tennis

Physiology

Anatomy

ANATOMY AND PHYSIOLOGY: CELLS, TISSUES, AND ORGANS (surgap;1979;unpublished)
Richard M Stawicki
Sheppard Air Force Base, Texas
This lesson defines the terms anatomy, physiology, and anatomical position, and identifies the basic composition of the cell, four types of tissue, organs of the body, and systems of the body.
none;none;students of the health sciences

Cardiology

BAROCEPTOR REVIEW (heartsm2;1981;unpublished)
Allen Rovick, R Zitnik, A Banda
Rush University, Chicago, Illinois

This cardiovascular physiology lesson provides elementary treatment of the baroceptor control system and explores the role of the effector responses in regulation of blood pressure by having the student complete a control diagram under guidance.

none;none;first year medical students and students of physiology

CARDIOVASCULAR PHYSIOLOGY PART III: CAPILLARY (capilary;1981;unpublished)
Allen Rovick, R Zitnik
Rush University, Chicago, Illinois

This cardiovascular physiology lesson covers the organization of circulatory circuits, distribution of pressure and velocity flows, and capillary fluid exchange. Elements in Starling's Hypothesis are included with specific examples.

none;none;first year medical students and students of physiology

CARDIOVASCULAR PHYSIOLOGY PART I: PRESSURE/FLOW RELATIONS (circsys;1981;unpublished)
Allen Rovick, Jerry Justic
Rush University, Chicago, Illinois

This lesson tests the student's understanding of blood flow relationships including pump capacity of the heart, tensile strength of blood vessels, and porosity of capillaries.

none;none;first year medical students and students of physiology

CARDIOVASCULAR PHYSIOLOGY PART II: REFLEX (reflex;1981;unpublished)
Allen Rovick, R Zitnik
Rush University, Chicago, Illinois

This lesson deals primarily with the baroceptor reflex. Pressure, flow, resistance relationships, postural effects, general efferent components and specific regional effects are covered.

none;none;first year medical students and students of physiology

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HEARTBREAK: A SIMULATION OF THE HEART AND PERIPHERAL CIRCULATION (heartsim;1980;unpublished)
C Dickenson, K Ahmed, C Goldsmith, D Sackett,
Allen Rovick, Lisa Brenner, Chisoo Choi
Rush University, Chicago, Illinois

This lesson provides a simulation of the heart and peripheral circulation, accounting for the heart inside the chest, systemic arteries and arterioles, and capillary bed and veins collecting blood from the capillary bed and returning it to the heart. The model can simulate most types of generalized heart disease, with the exception of valve lesions.

none;open-ended;first year medical students and students of physiology

PHYSIOLOGY AND PATHOLOGY OF CARDIOVASCULAR SHOCK (cvshock;1978;unpublished)
Steven R White
U of I College of Medicine, Chicago, Illinois

This lesson discusses the different types of shock and their effects on the cardiovascular system. Questions are asked during the instruction and there is a quiz at the end of the lesson.

none;40 minutes;students of medicine

ADRENAL GLAND STEROID BIOSYNTHESIS (adrenal;1981;1981)
Ralph E Schooley
School of Basic Medical Sciences, Univ. of Illinois

In this lesson the student must identify operant enzymes in adrenal gland biosynthetic pathways that are presented in random order. Enzymes which are not correctly identified are presented once again after all the enzymes have been treated.

none;none;medical students and students of the health sciences

GASP! A SIMULATION OF HUMAN VENTILATION, PULMONARY GAS EXCHANGE, GAS TRANSPORT, METABOLISM ... (gasp;1981;unpublished)
C Dickenson, D Ingram, E J Campbell, N L Jones,
A S Rebuck, K Ahmed, Thomas Stibolt, Jerry Justic,
Lisa Brenner, Chisoo Choi
Rush University, Chicago, Illinois

This research level simulation offers 300 alterable parameters and represents an accurate model of the human respiratory system. Instructional problems are offered to guide novices in the selection of parameters and variables. The model for this lesson was developed at St. Bartholomew's Hospital, London, England and McMaster University, Ontario, Canada.

none;open-ended;second year medical students and students of physiology, pathology and pulmonary medicine

STEROID STRUCTURES (steroid;1981;1981)
Ralph E Schooley
School of Basic Medical Sciences, Univ. of Illinois
In this lesson the student must identify 21 randomly presented steroid structures. Structures not correctly identified on the first try are presented again after all of the structures have been viewed.
none;none;medical students and students of the health sciences

THE THYROID (thyroid1;1981;1981)
Ralph E Schooley
School of Basic Medical Sciences, Univ. of Illinois
This lesson is designed to test the student over essential elements of thyroid physiology. Simple graphics and animation are employed in a linear format, and the student is presented with 30 self-assessment questions.
none;none;medical students and students of the health sciences

Pitot tubes

FLOW MEASURING DEVICES (che35;1979;unpublished)
Michael Gilbert, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana
This lesson demonstrates the operation and utilization of various simple fluid flow measurement devices.
none;none;chemical engineering students

Plagiarism

CASES ON CHEATING (cheating;1977;unpublished)
Charles D Kelso, J Clark Kelso
College of Law, Indiana University
These law exercises are designed to teach and test skill in analyzing issues and reasoning, both logically and judgmentally, when interpreting and applying a set of rules. The student must identify each major issue in each case and evaluate the strength of arguments which might be used in dealing with the issues.
none;none;law students

PLATO

Keyboard

HELLO, NURSE-MIDWIFERY STUDENT! (nmwintro;1981;1982)
Richard S Trynda
College of Nursing, U of I Med. Center, Chicago, Il.
This lesson familiarizes the student with some capabilities of the PLATO system in presenting educational materials and allows the student to practice interacting with the computer.
touch panel;none;nursing students

HELP (help;1973,76,82;unpublished)
Silas Warner
Indiana University
This lesson is designed to introduce the new PLATO user to the PLATO terminal. Topics included are the terminal itself, the keyset, and how to answer and change responses at an arrow. Lesson authors may arrange for students to see only selected parts of the lesson.
none;30 minutes;general

PLATO "group" records

SUBGROUP UTILITY PACKAGE (subgroup;1980;unpublished)
Nathan F Syfrig
Indiana University
This utility allows a group director to divide a group into small entities or "sub-groups". The director can specify who can create signons and how many signons the user can create. The utility can also automatically delete the oldest record in the group.
none;none;group directors

Political science

COMMUNITY DEVELOPMENT AUTHOR/INSTRUCTOR INFORMATION LESSON (cdcons5;1980;1982)
Terry Alliband, Dane Winberg
Southern Illinois University, Carbondale
This lesson contains an explanation of the scoring and help sequences of the associated community development lessons (cdcons, cdcons2, cdcons3, cdcons4). Also included is a short bibliography of community development literature.
none;10-15 minutes;instructors interested in using the associated community development lessons

Polynomials

FUNCTIONS AND THEIR GRAPHS (funcgraf;1981;unpublished)
Larry Dornhoff
Dept. of Mathematics, University of Illinois, Urbana
This lesson provides definitions, examples, algebraic notation, and graphs of functions. Exercises in the evaluation of functions, including composite functions, are included.
none;25-50 minutes;high school and college algebra students

POLYNOMIALS (polynoms;1981;unpublished)
Larry Dornhoff
Dept. of Mathematics, University of Illinois, Urbana
This lesson introduces algebraic polynomials, including terms, coefficients, degrees, and evaluation of polynomials. Exercises in the addition, subtraction, multiplication, and division of polynomials are provided, as well as exercises in short-cut "synthetic division" by divisors of the form "x - a".
none;35-70 minutes;high school and college algebra students

Poor laws

ENGLISH POOR LAW HISTORY (herb;1981;unpublished)
Marilyn Flynn, Robert Arnold, Tom Layman,
Dave Racine
School of Social Work, University of Illinois, Urbana
This lesson presents a brief history and discussion of the English Poor Law.
none;none;university/college students, law students

Poverty

DETERMINING POVERTY LINES (pline;1977;unpublished)
Marilyn Flynn, Tom Layman, Robert Arnold
School of Social Work, Univeristy of Illinois, Urbana
This lesson discusses the ways in which the federal government determines poverty lines.
none;none;university/college students, law students

Power resources

ENERGY USAGE (energy1;1976;unpublished)
David Churches, Silas Warner, Toufiq Siddiqi
Indiana University, Public & Environmental Affairs
This lesson is designed to illustrate the different relationships among energy forms, as well as present and historic patterns of energy consumption.
none;30 minutes;persons interested in energy consumption

WORLD ENERGY DIRECTORY (energy3;1976,82;unpublished)
David Churches, Silas Warner, Toufiq Siddiqi
Indiana University, Public and Environmental Affairs
This lesson gives oil and natural gas production and reserves for the 72 major oil-producing nations of the world with the most current figures available (as of December 1980).
none;30 minutes;general

WORLD ENERGY LIFESTYLE INDEX (energy4;1976;unpublished)
Toufiq Siddiqi, Silas Warner, David Churches,
Albert J Frisch, Barry Castleman
Indiana University, Public and Environmental Affairs

With this lesson the user can determine how much energy he or she uses each year, and where it goes. The short form may be selected, in which case, information from the user's utility bills is entered. Or, the long form, which is more accurate, may be used to compile an energy index from responses to questions about appliances owned, means of travel, etc.

none;20 minutes;general

Pragmatism

COMPARATIVE PHILOSOPHY (phil1;1980;unpublished)
Jerry W Joplin, Emil R Spees
Southern Illinois University, Carbondale, Illinois

This is an introductory course in philosophy for students who are interested in learning the relevancy of philosophy to their given subject matter.

none;none;persons interested in comparative philosophy

Pregnancy

ANEMIAS OF PREGNANCY (nmwanemia;1977,81;1982)
Sarah J Naber, Richard S Trynda
College of Nursing, U of I Med. Center, Chicago, Il.

The purpose of this lesson is to provide the student with an opportunity to make judgments in the management of anemias of pregnancy based on historical and laboratory data.

touch panel;none;nursing students

Problem solving

INTRODUCTION TO THE PROBLEM-SOLVING PROCESS
(psp;1980;unpublished)
Errol Magidson, William G Byrne
City Colleges of Chicago

This lesson presents the student with a simple problem designed to introduce the six steps in the problem-solving process.

none;none;general

Programming (Mathematics)

INTRODUCTION TO LINEAR PROGRAMMING (or9;1977;unpublished)
Lee Schruben, Paul S Zarnowski, Robert Breitman
Cornell University, Ithaca, New York

This is a four lesson series on linear programming. Areas treated are: introduction to linear relationships, the formulation of a linear program, and graphical and numerical solutions to linear programs.

fourth lesson needs touch panel;2-3 hours for series;undergraduate or graduate level

Propaganda

LOGIC: PROPAGANDA METHODS (prop;1976;unpublished)
Errol Magidson
Kennedy-King College, Chicago, Illinois

This lesson discusses the logical versus the illogical argument. Subjects treated are: appeal to prejudice, prestige, popular view, force, and pity.

none;none;college/university students

Property

FUTURE INTERESTS (morgan;1976;unpublished)
Thomas D Morgan
College of Law, University of Illinois, Urbana, Ill.

This law lesson is designed for students having varying degrees of experience working with future interests. Problems are presented in which the student is asked to identify the various interests illustrated.

none;none;students of law

QUIETING TITLE TO BLACKACRE (counsprop;1977;unpublished)
Jane Kelso, J Clark Kelso
College of Law, Indiana University

This law lesson simulates an initial interview with prospective clients regarding possible defenses to quiet a title action.

none;30 minutes;students of law

Proximate cause (Law)

NEGLIGENCE: IDENTIFYING ASSUMPTIONS (cavil;1979;unpublished)
Robert C Platt
Antioch Law School, Washington, D. C.

This law lesson defines terms related to negligence and presents two cases to illustrate the concepts.

none;none;law students

Psychiatric nursing

ANXIETY (anxious;1981;1982)
Janice M Layton
College of Nursing, U of I Med. Center, Chicago, Il.
This lesson defines anxiety, its threat to physical and psychological security, interpersonal communications, and the physiological, perceptual, mental and behavioral effects of anxiety.
none;none;nursing students

THE CONCEPT OF DEPENDENCE (depend;1981;unpublished)
Kathryne Dockstader, Beverly Bernstein,
Janice M Layton
College of Nursing, U of I Med. Center, Chicago, Il.
This lesson helps the student to define dependence, to identify normal dependency needs at various stages of development, and to recognize manifestations of abnormal dependency needs.
none;none;nursing students

Psychopharmacology

INTRODUCTION TO PSYCHOTROPIC DRUGS (psycho;1981;unpublished)
Sandra Y Barnes, Sylvia A Mann, Erica M Trausch,
Larry Kemp
College of Nursing, U of I Med. Center, Chicago, Il.
This lesson discusses the effects of drugs on the autonomic nervous system.
none;none;nursing students

Public health nursing

MEDICAID, TITLE XIX OF THE SOCIAL SECURITY ACT
(medicaid;1981;unpublished)
Evelyn Kahn, Linda Edwards, Larry Kemp
College of Nursing, U of I Med. Center, Chicago, Il.
Upon completion of this lesson the student should be able to analyze the impact of Medicaid on the availability and comprehensiveness of health care, apply provisions of Medicaid to clients in the community, demonstrate understanding of benefits under Public Aid, and acquire the skills necessary to utilize available health resources as a family advocate.
none;none;nursing students

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MEDICARE, TITLE XVIII OF THE SOCIAL SECURITY ACT
(care;1980;unpublished)
Linda Edwards, Evelyn Kahn, Larry Kemp
College of Nursing, U of I Med. Center, Chicago, Il.

Upon completion of this lesson the student should be able to analyze the impact of Medicare on the availability and comprehensiveness of health care, apply provisions of Medicare to clients in the community, demonstrate understanding of benefits under Public Aid, and acquire the skills necessary to utilize available health resources as a family advocate.

none;none;nursing students

Public speaking

SPEECH ANXIETY (anxiety;1979;unpublished)
Mary Hinchcliff
Dept. of Speech Communication, SIU, Carbondale, Ill.

This lesson is a program of systematic desensitization developed for the reduction of speech anxiety ("stage fright"). The lesson has three sections: 1) introductory information about speech anxiety and systematic desensitization, 2) progressive relaxation exercises, and 3) visualization exercises.

none;30 minutes;students in public speaking classes (any level)

Public welfare

DETERMINING POVERTY LINES (pline;1977;unpublished)
Marilyn Flynn, Tom Layman, Robert Arnold
School of Social Work, Univeristy of Illinois, Urbana

This lesson discusses the ways in which the federal government determines poverty lines.

none;none;university/college students, law students

Public welfare--Law

ENGLISH POOR LAW HISTORY (herb;1981;unpublished)
Marilyn Flynn, Robert Arnold, Tom Layman,
Dave Racine
School of Social Work, University of Illinois, Urbana

This lesson presents a brief history and discussion of the English Poor Law.

none;none;university/college students, law students

Pulmonary circulation

CARDIOVASCULAR PHYSIOLOGY PART III: CAPILLARY
(capilary;1981;unpublished)
Allen Rovick, R Zitnik
Rush University, Chicago, Illinois
This cardiovascular physiology lesson covers the organization of circulatory circuits, distribution of pressure and velocity flows, and capillary fluid exchange. Elements in Starling's Hypothesis are included with specific examples.
none;none;first year medical students and students of physiology

Punctuation

APOSTROPHE (dv153a;1978;unpublished)
Joan Jamieson, Joan Friedenberg
Danville C. C. School District, Danville, Illinois
This lesson teaches the student how and when to use an apostrophe in a sentence.
touch panel;none;elementary level students

CAPITALIZING AND USE OF PERIODS AND COMMAS IN QUOTED UTTERANCES (quotes;1979,81;unpublished)
Marguerite Thompson
City Colleges of Chicago
This lesson teaches the student to use capitalization and punctuation in quotations of various kinds.
none;none;composition students

SEMICOLONS: THEIR GRAMMATICAL AND STYLISTIC FUNCTIONS
(uisemi;1980;unpublished)
Michael Packert-Hall, Richard C Burke
Department of English, University of Illinois, Urbana
This lesson provides instruction and practice on the grammatical and stylistic functions of semicolons.
none;none;students of English

Questioning

QUESTIONING (ques;1981;unpublished)
Re Gibson, Diann Gordon
Southern Illinois University, Carbondale, Illinois
This lesson is designed to introduce the teaching strategy of questioning. A quiz follows the instruction.
none;20 minutes;student teachers

Queuing theory

QUEUING THEORY: THE SINGLE QUEUE, SINGLE SERVER QUEUING SYSTEM (sql;1977,81;unpublished)
Kent A Wendler
University of Illinois, Urbana
This lesson provides a systematic and detailed explanation of the "equations of state" for the single queue, single server queuing system. Also included is a simulation having parameters and options that can be manipulated by the student to produce his or her own queuing simulation.
none;theoretical section: 2 hours, simulation: open-ended; college/university level students

Quotation-marks

CAPITALIZING AND USE OF PERIODS AND COMMAS IN QUOTED UTTERANCES (quotes;1979,81;unpublished)
Marguerite Thompson
City Colleges of Chicago
This lesson teaches the student to use capitalization and punctuation in quotations of various kinds.
none;none;composition students

Ratio and proportion

RATIO, PROPORTION, AND VARIATION (ratiovar;1981;unpublished)
Larry Dornhoff
Dept. of Mathematics, University of Illinois, Urbana
This lesson provides definitions, worked examples, and student drill in the solution of word problems involving ratio, proportion, and direct, inverse, and joint variation.
none;30-60 minutes;high school and college algebra students

Reading (Elementary)

DAYS OF THE WEEK; YESTERDAY, TODAY, AND TOMORROW (dv156a;1978;unpublished)
Lori Roberts
Danville C. C. School District, Danville, Illinois
This lesson presents the student with the relationships of yesterday, today, and tomorrow.
touch panel;none;elementary level students

FAMILY RELATIONSHIPS (dv165a;1979;unpublished)
Joan Jamieson, Don Gillies
Danville C. C. School District, Danville, Illinois
This primary lesson presents the words used to refer to various family members and explains their relationship to one another.
touch panel;none;primary level students

KIDLIT 1 (alamo;1982;unpublished)
James D Quisenberry
CIM Dept., Southern Illinois University, Carbondale
This program contains four games based on children's books and their authors, characters, and plots.
none;open-ended;elementary students and teachers

RHYMING SKILLS (dv159a;1978;unpublished)
Lucille Gallegos-Jaramillo, Don Gillies
Danville C. C. School District, Danville, Illinois
This lesson presents six drills to test the student's ability to identify pictures of objects that rhyme.
touch panel;none;primary and elementary level students

SHAPE RECOGNITION (dv122b;1978;unpublished)
Dirk Grunwald
Danville C. C. School District, Danville, Illinois
This lesson provides a game in which the child hears a word and touches the correct shape on the screen. Items that are missed are presented again.
votrax; touch panel;none;primary level students

SILENT LETTERS (dv157a;1978;unpublished)
Jeff Kouzmanoff
Danville C. C. School District, Danville, Illinois
This lesson teaches the student about silent letters, why they exist, and how to identify them.
none;none;elementary level students

SPACE VOYAGE (dv155a;1978;unpublished)
Lucille Gallegos-Jaramillo, Don Gillies
Danville C. C. School District, Danville, Illinois
This lesson presents twenty story problems to test a student's reading ability. Short paragraphs are presented and the student is expected to answer questions about the paragraphs.
touch panel;none;elementary level students

THAT TIME OF YEAR (dv167a;1978;unpublished)
Joan Jamieson, Peter Kolodziej, Gregory Maggs
Danville C. C. School District, Danville, Illinois
This primary lesson presents the concepts of days, months, and seasons.
touch panel;none;primary level students

THE CASE OF AUNT SUE (dv162a;1978;unpublished)
Lucille Gallegos-Jaramillo, Gregory Maggs
Danville C. C. School District, Danville, Illinois
An exercise in reading comprehension, this lesson presents a short story and questions the student after each page of text. Also included are a discussion and a drill on remembering events in chronological order.
touch panel;none;elementary level students

VOCABULARY (dv168a;1978;unpublished)
Gregory Maggs
Danville C. C. School District, Danville, Illinois
This primary level drill presents pictures with their names. After viewing the examples, the student is asked to match the names and pictures.
touch panel, optional votrax;none;primary level students

VOWEL IDENTIFICATION (dv105b;1978;unpublished)
Don Gillies
Danville C. C. School District, Danville, Illinois
This is a short drill lesson that requires the student to fill in missing vowels according to the pictures displayed with the incomplete words. It is intended for use by students just beginning to read.
optional touch panel;none;beginning reading students

Reading comprehension

GENERAL/SPECIFIC: LEVELS OF GENERALITY (levels;1976,77;unpublished)
Robert Bator
Chicago City Colleges
This lesson provides instruction in levels of generality and specificity. The student is given practice in determining the important relationships that exists among words, phrases and sentences in magazines and textbooks.
none;none;students of basic English

READING FOR "MAIN IDEA" (gedreadr;1977;unpublished)
Paul Elliott, Deborah Elliott
Chicago City Colleges
This lesson provides practice in recognizing the main idea of a paragraph. The student is asked to determine if a given sentence is the main idea of a paragraph. Additional exercises are found in "gedread3r", "gedread4r," and "gedread5r".
none;none;adult education, GED students

READING FOR IMPLIED MEANING (gedreadl;1980;unpublished)
Paul Elliott, Deborah Elliott, Joan Sweany
City Colleges of Chicago
This lesson teaches the student to read paragraphs for meanings that may not always be there in exact words.
none;none;adult education, GED students

THE CASE OF AUNT SUE (dv162a;1978;unpublished)
Lucille Gallegos-Jaramillo, Gregory Maggs
Danville C. C. School District, Danville, Illinois
An exercise in reading comprehension, this lesson presents a short story and questions the student after each page of text. Also included are a discussion and a drill on remembering events in chronological order.
touch panel;none;elementary level students

Reading disability

SIMULATION OF READING DISABILITIES (readif;1975;unpublished)
Vicki Boysen
Iowa State University, Ames, Iowa
This lesson provides a simulation in which the student uses the Informal Reading Inventory instrument to test simulated students and interpret the results. The objectives are to determine instructional reading levels and diagnose reading skill weaknesses.
none;open-ended;student teachers

Realism

COMPARATIVE PHILOSOPHY (phill;1980;unpublished)
Jerry W Joplin, Emil R Spees
Southern Illinois University, Carbondale, Illinois
This is an introductory course in philosophy for students who are interested in learning the relevancy of philosophy to their given subject matter.
none;none;persons interested in comparative philosophy

Recreational games

Card games

ROUNDUP (roundup;1981;unpublished)
Paul Alfille
University of Illinois School of Medicine
This program is a Solitaire card game. The computer helps by making all of the obvious moves for the player. Statistics are kept.
none;open-ended;general

Games of strategy

THE BRAHMA PYRAMID (brahma;1981,82;unpublished)
Layne Friedman, Neil Hunt
University of Illinois / Indiana University

This game provides an exercise in logic. The student must successfully shift a stack of discs from one peg to a smaller peg, abiding by certain rules.

optional touch panel;open-ended;general

THE KING'S MISSION GAME (tkm;1981;1982)
Kent A Wendler
University of Illinois

This is a game in which the player is given a mission to kill all of a specified type of monster in one of the enchanted realms. Each realm is a matrix of possible positions which can be occupied by the player or by other objects. The game becomes progressively more difficult with continued play.

none;open-ended;ages eight and older

Simulations

ONE-ON-ONE BASKETBALL (basketball;1982;unpublished)
Brendan McGinty, Peter Zelchenko
University of Illinois

This game is an interterminal one-on-one basketball simulation. There are records for the biggest difference in the final score (point differential).

none;open-ended; five minutes per game;general

Sports

ONE-ON-ONE BASKETBALL (basketball;1982;unpublished)
Brendan McGinty, Peter Zelchenko
University of Illinois

This game is an interterminal one-on-one basketball simulation. There are records for the biggest difference in the final score (point differential).

none;open-ended; five minutes per game;general

Renal pharmacology

DIURETICS QUIZ (pha22;1974,81;unpublished)
Darin Brox, R M Henderson
University of Alberta, Canada / University of Kansas

This lesson presents ten questions on mercurial and osmotic diuretics and their effectiveness. The student receives feedback on each response.

touch panel;10 minutes;students of pharmacology

Respiration

GASP! A SIMULATION OF HUMAN VENTILATION, PULMONARY GAS EXCHANGE, GAS TRANSPORT, METABOLISM ... (gasp;1981;unpublished)
C Dickenson, D Ingram, E J Campbell, N L Jones,
A S Rebuck, K Ahmed, Thomas Stibolt, Jerry Justic,
Lisa Brenner, Chisoo Choi
Rush University, Chicago, Illinois

This research level simulation offers 300 alterable parameters and represents an accurate model of the human respiratory system. Instructional problems are offered to guide novices in the selection of parameters and variables. The model for this lesson was developed at St. Bartholomew's Hospital, London, England and McMaster University, Ontario, Canada.

none;open-ended;second year medical students and students of physiology, pathology and pulmonary medicine

RESPIRATORY CHAIN (nevilla;1981;unpublished)
William A Nevill, Ilias Sotos
Indiana University / Purdue University

This lesson discusses the chemical steps which comprise the respiratory chain, and illustrates the chemical reactions of the coenzymes and production of ATP.

none;20 minutes;students of the health sciences

Resuscitation

IMPORTANT ISSUES IN MEDICINE - ORDERS NOT TO RESUSCITATE (rescu;1979;unpublished)
Allan H Levy, David Block
School of Basic Medical Sciences, Univ. of Illinois

This lesson contains the text of an article from the "New England Journal of Medicine". Its purpose is to provide a focus for the discussion of problems in one area of medical ethics. The article, "Orders Not To Resuscitate", was written by M. T. Rabkin, G. Gillman, and N. R. Rice.

none;none;medical students, law students

Retrolental fibroplasia

RETROLENTAL FIBROPLASIA, BLINDNESS CAUSED BY OXYGEN THERAPY (rlf;1982;unpublished)
Robert J Smith
School of Basic Medical Sciences, U of I, Urbana

This lesson discusses the etiology, developmental processes, treatment, and prevention of retrolental fibroplasia. The mechanics section has graphic representations of the progressive disfiguration of the retina which is the outstanding characteristic of this disorder. Periodic questions are asked to assist the student in the retention of key points.

none;20 minutes;first and second year students of medicine

Rime

RHYMING SKILLS (dvl59a;1978;unpublished)
Lucille Gallegos-Jaramillo, Don Gillies
Danville C. C. School District, Danville, Illinois
This lesson presents six drills to test the student's ability to identify pictures of objects that rhyme.
touch panel;none;primary and elementary level students

Russian language--Grammar

RUSSIAN DRILLS FOR THE BEGINNING STUDENT (rlmrl;1973;unpublished)
Constance O Curtin, Nolen Provenzano,
Philip A Cooper, Clayton L Dawson
Comp.-based Educ. Res. Lab., University of Illinois
These lessons provide laboratory drill and practice for beginning and intermediate students of Russian.
audio discs;none;high school/college

Russian language--Pronunciation

RUSSIAN DRILLS FOR THE BEGINNING STUDENT (rlmrl;1973;unpublished)
Constance O Curtin, Nolen Provenzano,
Philip A Cooper, Clayton L Dawson
Comp.-based Educ. Res. Lab., University of Illinois
These lessons provide laboratory drill and practice for beginning and intermediate students of Russian.
audio discs;none;high school/college

Russian language--Reading

RUSSIAN DRILLS FOR THE BEGINNING STUDENT (rlmrl;1973;unpublished)
Constance O Curtin, Nolen Provenzano,
Philip A Cooper, Clayton L Dawson
Comp.-based Educ. Res. Lab., University of Illinois
These lessons provide laboratory drill and practice beginning and intermediate students of Russian.
audio discs;none;high school/college

Seasons

THAT TIME OF YEAR (dvl67a;1978;unpublished)
Joan Jamieson, Peter Kolodziej, Gregory Maggs
Danville C. C. School District, Danville, Illinois
This primary lesson presents the concepts of days, months, and seasons.
touch panel;none;primary level students

Sedatives

HYPNOTICS AND SEDATIVES (phc20;1974,81;unpublished)
R J Reiffenstein, Darin Brox
University of Alberta, Canada / University of Kansas

This lesson provides a review of sedatives and hypnotics and a ten question quiz over the material. The student may choose to do either.

touch panel;15 minutes;students of pharmacology

Segregation

SEGREGATION SIMULATION (segregate;1979;unpublished)
Michael R Huybensz
Cornell University Law School, Ithaca, New York

This lesson provides a simulation to illustrate how segregated neighborhoods come into being by way of the active production of segregated circumstances.

touch panel;open-ended;students of law, general

Semicolon

SEMICOLONS: THEIR GRAMMATICAL AND STYLISTIC FUNCTIONS (uisemi;1980;unpublished)
Michael Packert-Hall, Richard C Burke
Department of English, University of Illinois, Urbana

This lesson provides instruction and practice on the grammatical and stylistic functions of semicolons.

none;none;students of English

Semiconductors

DIFFUSION PROFILE PLOTTER (difplot;1976;unpublished)
Dale R Sinder
Dept. of Electrical Engineering, U of I, Urbana

This lesson computes and plots diffusion profiles for six different dopants in silicon.

none;open-ended;students of electrical engineering

Service programs

Data management

DATA ENTRY EDITOR FOR R. A. AVNER'S STAT PACKAGE (stated;1981;unpublished)
Paul Alfille
University of Illinois School of Medicine

This lesson provides an alternative dataset editor for entering data compatible with the Stat Package. Data can be entered for more than one variable at a time, and namesets are permitted. The lesson can also be used as a processor lesson. There is an index of specific parts of the Stat Package that can be accessed.

none;open-ended;users of the Stat Package with enough experimental data to warrant permanent storage in a dataset or nameset

Editor programs (PLATO)

-USE- COMMAND EDITOR (usedit;1981;unpublished)
Paul Alfille
University of Illinois School of Medicine
This lesson allows the user to create a list of TUTOR -use- commands in a common or nameset/dataset by displaying the list of blocks in the desired lesson. Single lesson or multiple lesson -use- formats can be created.
none;open-ended;PLATO authors

Numerical analysis

MATRIX ROUTINES (matrix;1973;unpublished)
Carol D Bennett
Physics Department, University of Illinois
This program provides matrix routines for eigenvalues and eigenvectors of symmetric matrices and for solutions to simultaneous linear algebraic equations.
none;open-ended;students of classical mechanics, elementary physics

Shock

INTRODUCTION TO SHOCK (chew3;1969,75,81;unpublished)
Sherrilyn DeJean, Gregory Olson
Indiana University School of Nursing
This lesson presents the basic hemodynamics of shock along with causes and symptoms of the shock state.
none;30 minutes;nursing or medical students

PHYSIOLOGY AND PATHOLOGY OF CARDIOVASCULAR SHOCK (cvshock;1978;unpublished)
Steven R White
U of I College of Medicine, Chicago, Illinois
This lesson discusses the different types of shock and their effects on the cardiovascular system. Questions are asked during the instruction and there is a quiz at the end of the lesson.
none;40 minutes;students of medicine

Short-term memory

REMEMBER (memry;1979;unpublished)
Mary Van De Warker, Peter Klassen
College of DuPage, Glen Ellyn, Illinois
This lesson is designed to help users improve their visual discrimination, sequencing, left to right tracking, and short term memory.
none;none;learning disabled persons or anyone wishing to improve their visual discrimination skills

Social problems

COMMUNITY DEVELOPMENT AUTHOR/INSTRUCTOR INFORMATION LESSON (cdcons5;1980;1982)
Terry Alliband, Dane Winberg
Southern Illinois University, Carbondale
This lesson contains an explanation of the scoring and help sequences of the associated community development lessons (cdcons, cdcons2, cdcons3, cdcons4). Also included is a short bibliography of community development literature.
none;10-15 minutes;instructors interested in using the associated community development lessons

DETERMINING POVERTY LINES (pline;1977;unpublished)
Marilyn Flynn, Tom Layman, Robert Arnold
School of Social Work, Univeristy of Illinois, Urbana
This lesson discusses the ways in which the federal government determines poverty lines.
none;none;university/college students, law students

SEGREGATION SIMULATION (segregate;1979;unpublished)
Michael R Huybensz
Cornell University Law School, Ithaca, New York
This lesson provides a simulation to illustrate how segregated neighborhoods come into being by way of the active production of segregated circumstances.
touch panel;open-ended;students of law, general

Social service

ENGLISH POOR LAW HISTORY (herb;1981;unpublished)
Marilyn Flynn, Robert Arnold, Tom Layman,
Dave Racine
School of Social Work, University of Illinois, Urbana
This lesson presents a brief history and discussion of the English Poor Law.
none;none;university/college students, law students

Sociolinguistics

LANGUAGE PLANNING (langplan;1980;unpublished)
Glenn Gilbert, Roger Bertelsen, Dane Winberg
Southern Illinois University, Carbondale, Illinois
This three part lesson begins with a discussion of language planning and the role of the language planner. A simulation in which the user plays the role of the language planner, choosing and implementing a language for a newly independent country, is also included.
none;30 minutes for each lesson;students of sociolinguistics

Sociology

COMMUNITY DEVELOPMENT AUTHOR/INSTRUCTOR INFORMATION LESSON (cdcons5;1980;1982)
Terry Alliband, Dane Winberg
Southern Illinois University, Carbondale
This lesson contains an explanation of the scoring and help sequences of the associated community development lessons (cdcons, cdcons2, cdcons3, cdcons4). Also included is a short bibliography of community development literature.
none;10-15 minutes;instructors interested in using the associated community development lessons

Solitaire (Game)

ROUNDUP (roundup;1981;unpublished)
Paul Alfille
University of Illinois School of Medicine
This program is a Solitaire card game. The computer helps by making all of the obvious moves for the player. Statistics are kept.
none;open-ended;general

Solution (Chemistry)

REGULAR SOLUTION THEORY (che31;1979;unpublished)
Timothy T Oberle, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana
This lesson teaches the student about using regular solution theory to find activity coefficients in binary and multicomponent liquid mixtures. There are five practice problems.
none;none;chemical engineering students

Spectrum analysis

INTRODUCTION TO MASS SPECTROSCOPY (maspec;1978;unpublished)
Jean Thrasher
Chemistry Department, Indiana University
This lesson provides an introduction to the mass spectrometer and to the interpretation of its graphs for identification of various organic compounds.
none;40 minutes;students of analytical or organic chemistry

Spelling ability--Testing

FLASHER -- A SPELLING DRILL (flasher;1981;unpublished)
Dan Potter
Learning Skills Center, Indiana University
This lesson provides four lists of 64 commonly-misspelled words from which 32 are selected for each quiz. The lesson may also be used as a processor lesson whereby an instructor may set up his or her own spelling drill.
none;open-ended;general

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WORD POWER - SPELLING (voclsp;1975-80;unpublished)
Richard T Scanlan, Michael S Vollmer,
David M Slayton
Classics Department, University of Illinois
Six lessons present spelling rules and provide intensive spelling practice.
none;approximately 50 minutes for each lesson;college/university students

Stage fright

SPEECH ANXIETY (anxiety;1979;unpublished)
Mary Hinchcliff
Dept. of Speech Communication, SIU, Carbondale, Ill.
This lesson is a program of systematic desensitization developed for the reduction of speech anxiety ("stage fright"). The lesson has three sections: 1) introductory information about speech anxiety and systematic desensitization, 2) progressive relaxation exercises, and 3) visualization exercises.
none;30 minutes;students in public speaking classes (any level)

Statistics

Education

STATISTICS FOR TEACHERS (milton;1981;unpublished)
James Maedke
Southern Illinois University, Carbondale, Illinois
This lesson discusses simplified statistics which aid in effective student evaluation. Practice exercises are provided.
none;none;teachers

Medicine

THE NORMAL DISTRIBUTION AND THE CENTRAL LIMIT THEORUM (hph;1981;unpublished)
Gregory Cowell, Lee Thompson
Rush University, Chicago, Illinois
This tutorial lesson introduces the student to the normal curve and its relationship to the central limit theorum in influential statistics. Interactive graphic displays allow the student to create graphs in response to questions. This lesson was originally developed by J. Cohen, University of Illinois.
none;45 minutes;graduate health systems management students

Statistics service programs

DATA ENTRY EDITOR FOR R. A. AVNER'S STAT PACKAGE
(stated;1981;unpublished)
Paul Alfille
University of Illinois School of Medicine

This lesson provides an alternative dataset editor for entering data compatible with the Stat Package. Data can be entered for more than one variable at a time, and namesets are permitted. The lesson can also be used as a processor lesson. There is an index of specific parts of the Stat Package that can be accessed.

none;open-ended;users of the Stat Package with enough experimental data to warrant permanent storage in a dataset or nameset

Steam--Tables, calculations, etc.

STEAM I (che43;1979;unpublished)
Timothy T Oberle, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana

This is one of two lessons on using steam tables to evaluate thermodynamics problems. The steam tables used are in IU units (metric). There are five practice problems.

none;none;chemical engineering students

STEAM II (che41;1979;unpublished)
Robert S Tomaskovic, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana

This is the second of two lessons on using steam tables to evaluate thermodynamics problems. The steam tables used are in IU units (metric). There are six practice problems.

none;none;chemical engineering students

Steroid hormone synthesis

ADRENAL GLAND STEROID BIOSYNTHESIS (adrenal;1981;1981)
Ralph E Schooley
School of Basic Medical Sciences, Univ. of Illinois

In this lesson the student must identify operant enzymes in adrenal gland biosynthetic pathways that are presented in random order. Enzymes which are not correctly identified are presented once again after all the enzymes have been treated.

none;none;medical students and students of the health sciences

Steroids

STEROID STRUCTURES (steroid;1981;1981)
Ralph E Schooley
School of Basic Medical Sciences, Univ. of Illinois
In this lesson the student must identify 21 randomly presented steroid structures. Structures not correctly identified on the first try are presented again after all of the structures have been viewed.
none;none;medical students and students of the health sciences

Stock-exchange

HOW TO READ THE STOCK MARKET TABLES (stockqo;1980;unpublished)
Tom Brooks
Southern Illinois University, Carbondale, Illinois
This lesson provides step by step instruction on reading and interpreting the stock market tables.
none;none;persons interested in the stock market

Students, Rating of

STATISTICS FOR TEACHERS (milton;1981;unpublished)
James Maedke
Southern Illinois University, Carbondale, Illinois
This lesson discusses simplified statistics which aid in effective student evaluation. Practice exercises are provided.
none;none;teachers

Study, Method of

LEARNING SKILLS DIAGNOSTIC INVENTORY (lscl;1980;unpublished)
Gordon Hartig, Laurel Gibson
Learning Skills Center, Indiana University
Designed for use in conjunction with instructor interview, this lesson provides students with a series of 60 statements to which they are asked to respond on the basis of their present study habits. At the end the computer calculates the results and suggests which of eight areas might need attention.
none;10-15 minutes;undergraduate students, especially freshmen

Subject headings, Medical

INTRODUCTION TO INDEX MEDICUS AND MESH (mesh;1980;unpublished)
Philip Musser, Jim Webb
Library of the Health Sciences, U of I, Urbana, Ill.
This lesson acquaints the health professional with the organization and content of Index Medicus and MeSH, and describes the relationships between the two different references. Examples demonstrating some effective uses of the resources are provided.
none;none;health professionals

Subtraction

CROSSNUMBER PUZZLES (dv109b;1978;unpublished)
Brian Smith
Danville C. C. School District, Danville, Illinois
This lesson is a crossword puzzle game in which the student fills in the answers to simple arithmetic problems to solve the puzzle.
none;none;elementary level students

NUMBER WARS (dv108b;1978;unpublished)
Dirk Grunwald
Danville C. C. School District, Danville, Illinois
With a "space war" scenario, this lesson offers the student practice in addition, subtraction, multiplication and division problems.
none;none;elementary level students

SUBTRACTION BOXES (dv104a;1978;unpublished)
Bruce Maggs
Danville C. C. School District, Danville, Illinois
This lesson presents a short introduction and then requires the student to fill in parts of a "magic square" to solve simple subtraction problems. Fifteen "magic squares" are offered.
touch panel;none;elementary level students

SUBTRACTION WITH TANKS (dv117b;1978;unpublished)
Dirk Grunwald
Danville C. C. School System, Danville, Illinois
This elementary lesson teaches subtraction by way of an animated tank game.
none;none;elementary level students

WELCOME TO BLOKIT (dv110b;1978;unpublished)
Damon Scaggs
Danville C. C. School District, Danville, Illinois
This is a mathematics game of Bingo in which the student tries to get four numbers in a row on the playing card by using combinations of two dice rolls given by the computer.
none;none;elementary level students

WELCOME TO SUM-THING (dv115b;1978;unpublished)
Ken Metheny
Danville C. C. School District, Danville, Illinois
This elementary math drill gives the student a block of numbers and asks the student to pick two adjacent numbers that equal the desired value.
touch panel;none;elementary level students

Surgery--Terminology

MEDICAL-SURGICAL TERMINOLOGY TEST (stermtst;1980;unpublished)
Richard M Stawicki
Sheppard Air Force Base, Texas
This lesson provides a test for the student on the prefixes, suffixes, and root words which define surgical operations.
none;none;students of the health sciences

MEDICAL-SURGICAL TERMINOLOGY (surgterm;1979;unpublished)
Richard M Stawicki
Sheppard Air Force Base, Texas
This lesson teaches the student to combine prefixes, suffixes, and root words to define surgical operations.
none;none;students of the health sciences

Syllabication

WORD DIVISION (dv103a;1978;unpublished)
Stephen Gray
Danville C. C. School District, Danville, Illinois
This lesson presents the grammatical rules for word division and provides the student with extensive drilling.
optional touch panel;none;elementary level students

Synonyms

SAME, OPPOSITE, AND DIFFERENT (dv161a;1978;unpublished)
Mike Hollander
Danville C. C. School District, Danville, Illinois
This elementary lesson discusses the concepts of same, opposite, and different.
touch panel;none;elementary level students

Synoptic climatology

THE SYNOPTIC CODE (synoptic;1981;unpublished)
Valerie Schmid
Laboratory for Atmospheric Research, U of I, Urbana
This introductory lesson provides instruction and practice on decoding the standard symbols on surface weather charts.
none;45 minutes;elementary level meterology students

Teaching

QUESTIONING (ques;1981;unpublished)
Re Gibson, Diann Gordon
Southern Illinois University, Carbondale, Illinois
This lesson is designed to introduce the teaching strategy of questioning. A quiz follows the instruction.
none;20 minutes;student teachers

Television--Production and direction

T. V. TITLER (titler;1978;unpublished)
Roger J Inman
Office of Instructional Resources, U of I, Urbana
This lesson is designed to function as a TV-like programmable character generator with 25 "pages" of memory. Each page can be programmed using a special typeface, a large size and a small size.
none;open-ended;persons interested in television graphics

TV PICTURIZATION (tvornottv;1975;unpublished)
John Railing
Indiana University
This four part lesson provides instruction on different aspects of television picturization. The areas covered are the primary elements (the actors), the secondary and tertiary elements of camera placement and movement, and editing. A test follows the instruction.
none;45 minutes;students of telecommunication

Tennis

A QUALITATIVE ANALYSIS OF THE FOREHAND STROKE IN TENNIS (tenfml;1981;unpublished)
Larry Good, Diann Gordon
Southern Illinois University, Carbondale, Illinois
This two unit lesson teaches the student to analyze human motion and understand the underlying principles, and to apply the mechanical principles of force and motion to an analysis of the forehand stroke in tennis.
none;none;students of physical education; persons interested in tennis

Thermodynamics

ADVANCED THERMODYNAMIC DIAGRAMS (che26;1977,78,79;unpublished)
Timothy T Oberle, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana
This is a lesson on reading and using various diagrams designed for a junior level thermodynamics course in chemical engineering. There are six practice problems.
touch panel;none;chemical engineering students

CARNOT HEAT ENGINES (che28;1979;unpublished)
Robert S Tomaskovic, Timothy T Oberle
Dept. of Chemical Engineering, U of I, Urbana
This is a lesson on Carnot cycle analysis designed for a junior level thermodynamics course in chemical engineering.
none;none;chemical engineering students

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COMPRESSION AND EXPANSION OF FLUIDS AND POWER CYCLES
(che52;1981;unpublished)
Robert S Tomaskovic, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana
This lesson treats the derivation of expressions for heat transferred and work done by a pure fluid during batch (non-flow) and flow process. Both isothermal and adiabatic conditions are investigated along with effects of staging. Also discussed are the internal combustion engine and steam power cycle. There are six practice problems.
none;none;chemical engineering students

ENTROPY EFFECTS (che23;1978,79;unpublished)
Timothy T Oberle, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana
This lesson provides a lesson on entropy and entropy changes for thermodynamics students in chemical engineering. There are six different problems with randomized variables.
none;none;students of chemical engineering

EVALUATION OF FUGACITY COEFFICIENTS - PURE MATERIALS
(che42;1979;unpublished)
Robert S Tomaskovic, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana
This lesson describes various methods for evaluation of fugacity coefficients of pure gases, liquids, and solids, and is designed for undergraduate thermodynamics students. There are five practice problems.
none;none;chemical engineering students

EVALUATION OF FUGACITY COEFFICIENTS - MIXTURES
(che50;1979;unpublished)
Robert S Tomaskovic, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana
This lesson describes various methods for evaluation of fugacity coefficients of gas phase mixtures, and introduces solubility of liquids and solids in a dense gas. There are four practice problems.
none;none;chemical engineering students

HEAT CONDUCTION (che33;1979;unpublished)
Michael Gilbert, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana
This is a lesson on heat conduction in solid bodies, including resistances in series and in parallel. It is designed for a beginning level heat transfer course in chemical engineering. There are five practice problems.
none;none;chemical engineering students

INTRODUCTION TO HEAT EXCHANGERS (che19;1978;unpublished)
Michael Gilbert, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana

This lesson describes elemental heat exchanger design and the difference between cocurrent and countercurrent operation. The use of the log mean temperature is also demonstrated. Problems for practice are included.

none;none;chemical engineering students

LIQUID-LIQUID EQUILIBRIUM (che36;1978;unpublished)
Charles A Eckert, Timothy T Oberle
Dept. of Chemical Engineering, U of I, Urbana

This lesson provides practice with the calculation and prediction of multicomponent liquid-liquid equilibrium problems.

none;open-ended;chemical engineering students

LIQUID-LIQUID EQUILIBRIUM (che20;1980;unpublished)
Robert S Tomaskovic, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana

This is a lesson on liquid-liquid equilibrium and phase immiscibility designed for thermodynamics students in chemical engineering. Practice problems are included.

touch panel;none;students of chemical engineering

MAXWELL RELATIONSHIPS (che44;1979;unpublished)
Timothy T Oberle, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana

This is a lesson on the thermodynamic Maxwell relationships designed for junior thermodynamics students in chemical engineering. There are six practice problems.

touch panel;none;chemical engineering students

PARTIAL MOLAR PROPERTIES AND EXCESS FUNCTIONS (che45;1980;unpublished)
Robert S Tomaskovic, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana

This lesson introduces partial molar properties, property change in mixing, and excess functions. Most of the problems are graphical and make use of the method of intercepts. There are five practice problems.

touch panel;none;chemical engineering students

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REFRIGERATION CYCLES AND LIQUEFACTION PROCESSES (che51;1980;unpublished)

Robert S Tomaskovic, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana

This lesson involves the use of various types of diagrams to evaluate important quantities for some typical refrigeration cycles. Two processes for the liquifaction of gases are also studied.

none;none;chemical engineering students

SOLID-LIQUID EQUILIBRIUM (che47;1980;unpublished)

Robert S Tomaskovic, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana

This lesson deals with solid-liquid equilibrium. Both ideal and non-ideal systems are investigated. Regular solution theory is used to predict liquid phase nonideality. The effect of temperature on the heat of fusion, mixed solvents, and freezing point curves are discussed. There are six practice problems.

none;none;chemical engineering students

STEAM I (che43;1979;unpublished)

Timothy T Oberle, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana

This is one of two lessons on using steam tables to evaluate thermodynamics problems. The steam tables used are in IU units (metric). There are five practice problems.

none;none;chemical engineering students

STEAM II (che41;1979;unpublished)

Robert S Tomaskovic, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana

This is the second of two lessons on using steam tables to evaluate thermodynamics problems. The steam tables used are in IU units (metric). There are six practice problems.

none;none;chemical engineering students

THE CORRELATION OF ACTIVITY COEFFICIENTS USING VARIOUS SOLUTIONS TO THE GIBBS-DUHEM EQUATION (che25;1979;unpublished)

Timothy T Oberle, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana

This is a lesson on using various equations to fit binary activity coefficient data, designed for students in a first chemical engineering thermodynamics course. There are six exercises.

none;none;chemical engineering students

THERMODYNAMIC DIAGRAMS (BASIC) (che29;1977,79;unpublished)
Timothy T Oberle, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana
This is a lesson on reading and using various diagrams designed for a sophomore level thermodynamics course in chemical engineering. There are five practice problems.
touch panel;none;chemical engineering students

VAPOR-LIQUID EQUILIBRIUM AND AZEOTROPES (che40;1979;unpublished)
Timothy T Oberle, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana
This is a lesson on vapor-liquid equilibrium and azeotropes designed for undergraduate students studying thermodynamics and phase equilibrium. There are six practice problems.
none;none;chemical engineering students

Thyroid gland

THE THYROID (thyroid1;1981;1981)
Ralph E Schooley
School of Basic Medical Sciences, Univ. of Illinois
This lesson is designed to test the student over essential elements of thyroid physiology. Simple graphics and animation are employed in a linear format, and the student is presented with 30 self-assessment questions.
none;none;medical students and students of the health sciences

Thyroid hormones

THE THYROID (thyroid1;1981;1981)
Ralph E Schooley
School of Basic Medical Sciences, Univ. of Illinois
This lesson is designed to test the student over essential elements of thyroid physiology. Simple graphics and animation are employed in a linear format, and the student is presented with 30 self-assessment questions.
none;none;medical students and students of the health sciences

Tissues

ANATOMY AND PHYSIOLOGY: CELLS, TISSUES, AND ORGANS (surgap;1979;unpublished)
Richard M Stawicki
Sheppard Air Force Base, Texas
This lesson defines the terms anatomy, physiology, and anatomical position, and identifies the basic composition of the cell, four types of tissue, organs of the body, and systems of the body.
none;none;students of the health sciences

Torts

ECONOMICS OF TORT LIABILITY (eclaw;1981;unpublished)
John Prather Brown, Thomas Wheeler,
Michael R Huybensz, Robert C Platt
Cornell University Law School, Ithaca, New York
This lesson uses the example (taken from hundreds of cases of the late 19th century) of the interaction of a farmer and a train to analyse the effect of various rules of tort.
none;none;students of law

Toxicology

CHOLINERGIC MECHANISMS (pha04;1981;unpublished)
Darin Brox, D Cook
University of Alberta, Canada
This pharmacology lesson presents the structure, toxicity, receptors, locus of muscarinic sites, and antagonists of cholinergic mechanisms.
touch panel;20 minutes;students of pharmacology

Utility programs

Editor programs (PLATO)

-USE- COMMAND EDITOR (usedit;1981;unpublished)
Paul Alfille
University of Illinois School of Medicine
This lesson allows the user to create a list of TUTOR -use- commands in a common or nameset/dataset by displaying the list of blocks in the desired lesson. Single lesson or multiple lesson -use- formats can be created.
none;open-ended;PLATO authors

PLATO "group" records

SUBGROUP UTILITY PACKAGE (subgroup;1980;unpublished)
Nathan F Syfrig
Indiana University
This utility allows a group director to divide a group into small entities or "sub-groups". The director can specify who can create signons and how many signons the user can create. The utility can also automatically delete the oldest record in the group.
none;none;group directors

PLATO printing capabilities
THE MAILROOM (mailroom;1981;unpublished)
Melanie C Geyer, David R Abernathy
Bell System Center, Technical Educ., Lisle, Ill.
This processor program allows a user to format text or labels for printing by: storing a list of names and associated information, allowing entry and storage of text items (such as the body of a letter) as well as formatting the text items for any specified individuals. Access to a nameset is required.
none;open-ended;general

Venturi tubes

FLOW MEASURING DEVICES (che35;1979;unpublished)
Michael Gilbert, Charles A Eckert
Dept. of Chemical Engineering, U of I, Urbana
This lesson demonstrates the operation and utilization of various simple fluid flow measurement devices.
none;none;chemical engineering students

Veterinary medicine

CANINE NEUROLOGICAL DISORDERS (neurox;1976;1981)
Alan Parker, Richard S Trynda, Lawrence R North
College of Veterinary Medicine, U of I, Urbana
In this lesson the student chooses a clinical neurological case and attempts to localize the lesion and determine its severity by obtaining information on the animal's nervous system. Thirty cases are available.
none;15-20 minutes per case;students of veterinary medicine

Veterinary neurology

CANINE NEUROLOGICAL DISORDERS (neurox;1976;1981)
Alan Parker, Richard S Trynda, Lawrence R North
College of Veterinary Medicine, U of I, Urbana
In this lesson the student chooses a clinical neurological case and attempts to localize the lesion and determine its severity by obtaining information on the animal's nervous system. Thirty cases are available.
none;15-20 minutes per case;students of veterinary medicine

Visual discrimination

REMEMBER (memry;1979;unpublished)
Mary Van De Warker, Peter Klassen
College of DuPage, Glen Ellyn, Illinois
This lesson is designed to help users improve their visual discrimination, sequencing, left to right tracking, and short term memory.
none;none;learning disabled persons or anyone wishing to improve their visual discrimination skills

Vocabulary

English language--Word formation

WORD POWER - SPELLING (voclsp;1975-80;unpublished)
Richard T Scanlan, Michael S Vollmer,
David M Slayton
Classics Department, University of Illinois

Six lessons present spelling rules and provide intensive spelling practice.

none;approximately 50 minutes for each lesson;college/university students

Vocational guidance

ACT (actii;1981;unpublished)
David C Barnett
Department of Psychology, Iowa State University, Ames

This lesson is designed to train college or university academic advisors in the use of the American College Testing Assessment Profile. The contents are adapted from material by the American College Testing Program. A brief test is offered at the end of the lesson to assess the student's understanding of the material presented.

none;30-45 minutes;college/university academic advisors and high school counselors

KUDER (kuder;1981;unpublished)
Donald G Zytowski, David C Barnett
Department of Psychology, Iowa State University, Ames

This lesson is designed to train graduate level beginning counseling students in the interpretation and use of the results of the Kuder Occupational Interest Survey, a vocational interest test. A competency test is included to assess the student's mastery of the material.

none;25-30 minutes;graduate students in counseling

Vowels

LONG AND SHORT VOWEL SOUNDS (dvl51a;1978;unpublished)
Don Gillies
Danville C. C. School District, Danville, Illinois

This primary lesson provides 32 separate drills that test the student's ability to match vowel sounds through pictures.

touch panel;none;primary level students

SILENT LETTERS (dvl57a;1978;unpublished)
Jeff Kouzmanoff
Danville C. C. School District, Danville, Illinois

This lesson teaches the student about silent letters, why they exist, and how to identify them.

none;none;elementary level students

VOWEL IDENTIFICATION (dv105b;1978;unpublished)
Don Gillies
Danville C. C. School District, Danville, Illinois
This is a short drill lesson that requires the student to fill in missing vowels according to the pictures displayed with the incomplete words. It is intended for use by students just beginning to read.
optional touch panel;none;beginning reading students

VOWEL SOUNDS (dv124b;1978;unpublished)
Greg Janusz
Danville C. C. School District, Danville, Illinois
This elementary lesson presents fifteen words and the student must distinguish among the sounds "a" as in draw, "a" as in part, and "u" as in fur.
touch panel;none;elementary level students

Waterfowl management

MISSISSIPPI VALLEY CANADIAN GOOSE POPULATION (duck;1981;unpublished)
Dennis Gruner
Southern Illinois University, Carbondale, Illinois
This is a simulation game on waterfowl management, presenting some of the problems and decisions of a waterfowl manager.
none;none;persons interested in waterfowl management

Weather

THE SYNOPTIC CODE (synoptic;1981;unpublished)
Valerie Schmid
Laboratory for Atmospheric Research, U of I, Urbana
This introductory lesson provides instruction and practice on decoding the standard symbols on surface weather charts.
none;45 minutes;elementary level meterology students

Weights and measures

Metric system

METRIC WEIGHTS AND VOLUME (dv145a;1978;unpublished)
Don Gillies
Danville C. C. School District, Danville, Illinois
This elementary lesson briefly introduces the student to weight and volume in the metric system.
touch panel;none;elementary level students

THE MATHEMATICS OF DOSAGES (gnmath;1980,81;1982)
Mathematics Module Committee, Richard S Trynda,
Larry Kemp
College of Nursing, U of I Med. Center, Chicago, Il.
In this lesson the student will learn to compute dosages for tablets, injections and intravenous medication, convert metric units to apothecary or English units and vice versa, calculate the drip rate per minute and solution rate per hour for intravenous fluids, and apply the acquired knowledge and skills to clinical situations.
none;none;nursing students

THE METRIC SYSTEM (dv120b;1978;unpublished)
Kevin Seager
Danville C. C. School District, Danville, Illinois
This lesson provides a very elementary introduction to the metric system for measuring distance. The student learns about millimeters, centimeters, meters and kilometers.
touch panel;none;elementary level students

Word formation

WORD POWER - SPELLING (voclsp;1975-80;unpublished)
Richard T Scanlan, Michael S Vollmer,
David M Slayton
Classics Department, University of Illinois
Six lessons present spelling rules and provide intensive spelling practice.
none;approximately 50 minutes for each lesson;college/university students

Word games

SCRAMBLED WORDS (dv139b;1978;unpublished)
Bruce Maggs
Danville C. C. School District, Danville, Illinois
This program contains scrambled word puzzles, each one of them having a "theme".
none;open-ended;elementary level students

WORDFINDS (dv131b;1978;unpublished)
Bruce Maggs
Danville C. C. School District, Danville, Illinois
This program provides several computer "wordfind" games. Each wordfind game has a theme and by means of a cursor the user indicates to the computer that a word has been found.
none;open-ended;elementary level students